

Volume 5

Pages 848 - 1057

UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA

BEFORE THE HONORABLE WILLIAM H. ALSUP

LISA GARVEY, individually and on )  
behalf of all others similarly )  
situated, )

Plaintiff, )

VS. )

No. C 11-2575 WHA

KMART CORPORATION, and DOES 1 )  
through 50 inclusive, )

Defendants. )

San Francisco, California

Monday

November 19, 2012

**TRANSCRIPT OF PROCEEDINGS**

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P R O C E E D I N G S

NOVEMBER 19, 2012

7:40 a.m.

**THE COURT:** Welcome back, everyone. Please be seated.

So we're onto our last witness. Anything to take up before we go to the next witness?

**MR. ADKINS:** Yes, your Honor. I had a housekeeping matter with respect to some of the exhibits.

I have handed your clerk the stipulation that was filed November 18th relating to -- it's a stipulation for the admissibility of evidence exhibits in this case, and I would just like to read that into the record and formally move those exhibits in if that's okay.

**THE COURT:** Yes. Go ahead.

**MR. ADKINS:** Pursuant to that stipulation, your Honor, we would move into evidence Exhibits 1 through 15, 37, 157 through 187, 189 through 191, 193 --

(Discussion held off the record amongst defense counsel.)

**THE COURT:** 218, it says here.

**MR. ADKINS:** Sorry, your Honor.

**THE COURT:** There's a 218 on here.

**MR. ADKINS:** And 218.

Also, in the exhibit is a reference to another exhibit, which has now been marked by the plaintiffs as 386. And so we would move all of those exhibits.

**THE COURT:** All received. Agreed?

1           **MR. MATTHEW RIGHETTI:** Yes, your Honor.

2           **THE COURT:** All received.

3           (Trial Exhibits 1 through 15, 37, 157 through 187, 189  
4 through 191, 193 and 218 received in evidence)

5           **MR. MATTHEW RIGHETTI:** Is 387 and 388 in? I think  
6 they are.

7           **THE COURT:** I don't have them in.

8           **MR. MATTHEW RIGHETTI:** Those are the summaries.

9           **THE COURT:** I have 386 in. I don't have 387 in.

10          **MR. ADKINS:** No objection if plaintiffs are moving  
11 those in, your Honor.

12          **THE COURT:** 387?

13          **MR. MATTHEW RIGHETTI:** 388.

14          **THE COURT:** I'm sorry. Give me the exact number  
15 again. I'm confused.

16          **MR. MATTHEW RIGHETTI:** 387 and 388.

17          **THE COURT:** Both received in evidence.

18          **MR. MATTHEW RIGHETTI:** Those are summaries of 386.

19          **THE COURT:** Okay. Received.

20          (Trial Exhibits 387 and 388 received in evidence)

21          **MR. ADKINS:** And the last one, your Honor, just  
22 subsets of 218 were clips of a video 218-B and 218-C, which  
23 were identified by witnesses. We would move those in, too.

24          **THE COURT:** Any objection?

25          **MR. DOSTART:** No objection, your Honor.

1           **THE COURT:** Thank you.

2           Received in evidence.

3           (Trial Exhibits 218-B and 218-C received in evidence.)

4           **MR. ADKINS:** Thank you, your Honor.

5           **MR. DOSTART:** We have one more housekeeping item in  
6 regards to exhibits, your Honor.

7           **THE COURT:** Sure.

8           **MR. DOSTART:** Last night at approximately 8:30 p.m. we  
9 received four video clip segments that defendant intends to use  
10 today on direct examination with their expert. And pursuant to  
11 Paragraph 9 of your Honor's guidelines for bench trials, they  
12 should be excluded.

13          **THE COURT:** Let's hear what do you have say?

14          **MR. WOHL:** Yes, your Honor.

15          First off, of course, all the videos are in evidence.  
16 This is just a question of designation. We did the --

17          **THE COURT:** Didn't we go through this before? This  
18 very problem?

19          **MR. DOSTART:** Yes, we did, your Honor.

20          **THE COURT:** Okay. I'm going to give you a choice.  
21 Now, let me hear what Mr. Wohl has to say.

22          **MR. WOHL:** Yes, your Honor. I'll make it very quick.  
23 We did the very best we could. The complexity is that  
24 each file has a very specific number on it and there was some  
25 confusion, unfortunately, between myself and the other folks on

1 the case as to exactly which ones Dr. Fernandez wanted to  
2 comment on, and we discovered that with missed four of them so.  
3 So as soon as we determined that four were missing, we  
4 immediately emailed plaintiff's counsel.

5 They are all very short. They are not really different in  
6 kind with what they have already seen. There is really no  
7 prejudice here, your Honor. And if I'm not permitted to use it  
8 through Dr. Fernandez, I could simply play it as part of my  
9 closing because it is in evidence.

10 But I think it would be easier for both sides if we just  
11 got it in through him. So I would ask the Court's indulgence  
12 for this oversight. And I would apologize to both the Court  
13 and counsel, as I did last night, and the Court for the  
14 oversight.

15 **THE COURT:** I will sustain the objection if you really  
16 care about it, but I will delay proceedings by one day. We'll  
17 take a recess today so that you'll have the time that you need,  
18 if that's what you really want to do.

19 **MR. DOSTART:** We have no objection then, your Honor.

20 **THE COURT:** All right. The objection is withdrawn.  
21 All right. You may use them.

22 Mr. Wohl, this is so irritating. With all the lawyers  
23 you've got over there, you could not be fair to the plaintiffs  
24 in this case and you spring this on them at night? You get  
25 away with it. You're getting away with it as a concession to

1 the shortness of life, but it is irritating that you cannot get  
2 your act together.

3 But I've got calendars to run. Plaintiffs have got  
4 calendars to run and other cases to do. So you're going to get  
5 away with it as a result. This is not right, but fine.

6 Anything more by way of housekeeping?

7 **MR. DOSTART:** Nothing further from plaintiffs, your  
8 Honor.

9 **THE COURT:** All right. This is our last witness,  
10 correct?

11 **MR. WOHL:** Yes, your Honor.

12 **MR. DOSTART:** Correct.

13 **THE COURT:** Call your last witness.

14 **MR. WOHL:** Thank you very much, your Honor. The  
15 defense calls Dr. Jeffrey Fernandez.

16 **THE COURT:** Welcome. Please stand over there and  
17 raise your right hand.

18 **JEFFREY FERNANDEZ,**  
19 called as a witness for the Defendant herein, having been first  
20 duly sworn, was examined and testified as follows:

21 **THE WITNESS:** I do.

22 **THE CLERK:** Okay. Thank you. Please be seated.

23 **THE COURT:** All right. Welcome.

24 You need to sit about this close to the microphone  
25 (indicating). Say your name, please.

1           **THE WITNESS:** Jeffrey Fernandez.

2           **THE COURT:** Perfect. Thank you.

3           Go ahead, Mr. Wohl.

4           **MR. WOHL:** Thank you, your Honor.

5                           **DIRECT EXAMINATION**

6           **BY MR. WOHL:**

7           **Q.** Thank you, your Honor. Good morning, Dr. Fernandez.

8           **A.** Good morning.

9           **Q.** Could you please tell the Court what is your current  
10 position of employment?

11          **A.** I'm the managing consultant at J.F. Associates.

12          **Q.** What is J.F. Associates?

13          **A.** It's an engineering consulting company based in Vienna,  
14 Virginia.

15          **Q.** And what type of work does J.F. Associates do -- does?  
16 Sorry.

17          **A.** We do consulting in the area of industrial ergonomics,  
18 time and motion study process improvement, ergonomics, supply  
19 chain.

20          **Q.** And how long has your firm been in existence?

21          **A.** For about nine years.

22          **Q.** I would like to have you give the Court some information  
23 about your educational background. So let's start, where did  
24 you complete your education?

25          **A.** I got my Bachelor's in mechanical engineering from NED



1 University.

2 Q. Any degrees past your -- when did you receive your  
3 Bachelor's?

4 A. In 1982.

5 Q. And any degrees after your Bachelor's degree?

6 A. I got my Master's in 1983 from Texas Tech University and  
7 my PhD in 1986 from Texas Tech University.

8 Q. And any of those degrees concerning ergonomics?

9 A. My last two degrees, my Master's and my PhD, were in the  
10 area of ergonomics.

11 Q. Okay. Did you also study ergonomics in your Bachelor's  
12 course of study?

13 A. I did a course on ergonomics in the industrial engineering  
14 program at Texas Tech University. You have a specialization  
15 and I specialized in ergonomics within the Department of  
16 Industrial Engineering.

17 Q. The Court has heard reference to ergonomics and from Dr.  
18 Johnson the definition of ergonomics. I'm going to give you a  
19 chance to tell the Court what ergonomics is?

20 A. Ergonomics is matching the task demands with human  
21 capabilities so as to increase productivity and reduce the risk  
22 of -- reduce the risk of injury or improve the health and  
23 safety of workers.

24 Q. Do you believe that ergonomics is relevant in this case as  
25 you understand the issues in this case to be?

1 A. I do.

2 Q. And why do you say so?

3 A. Because whatever changes you make will impact both the  
4 health and safety of the worker and impact productivity.

5 Q. And what is it about an ergonomist that would make one  
6 qualified to opine on such subjects?

7 A. We have -- I'm in the area of physical ergonomics, as  
8 opposed to cognitive.

9 So in physical ergonomics we're involved in anthropometry  
10 and biomechanics, sometimes in physiology. And so we look at  
11 the workplace and we evaluate the risk and we try to improve  
12 the workplace.

13 Q. Can you just define for the Court what anthropometry is?

14 A. Anthropometry is the measurement of humans.

15 Q. Do you mean the physical measurements?

16 A. The physical measurements of humans.

17 Q. And how is that relevant to an ergonomics analysis?

18 A. There are two types of human measurements. One is for fit  
19 static measurements and dynamic measurements.

20 Static measurements are the ones you take so the person  
21 can fit in the workplace. Dynamic measurements are taken so  
22 that the person can function in the workplace.

23 Q. You mentioned psychological ergonomics. What is the  
24 difference between that and physical ergonomics?

25 A. Cognitive ergonomics is as it relates to how one thinks

1 and how one would perceive different items. Design of -- I'll  
2 give you an example.

3 Microsoft and a number of other companies that develop  
4 software. They have got cognitive ergonomists that design for  
5 them the interface. So what's the best way to interact with  
6 the -- with the software that you have, the front end as they  
7 call it?

8 Q. And do you think cognitive ergonomics is what's at issue  
9 in this case or physical ergonomics?

10 A. Physical ergonomics.

11 Q. And your background is in which area of ergonomics?

12 A. In physical ergonomics.

13 Q. Do you hold any professional certifications in the area of  
14 either industrial engineering or ergonomics?

15 A. I have a professional engineering degree in industrial  
16 ergonomics in the State of Texas. I'm certified as a certified  
17 professional ergonomist, CPE.

18 Q. Say it again, please?

19 A. CPE.

20 Q. For certified professional ergonomist?

21 A. Yes.

22 Q. Have you served as a member of any local, state or  
23 national societies or board, organizations in your field?

24 A. I have served in a number of capacities. At the moment I  
25 am on the board of the CPE. In fact, I'm the chairman of the

1 Exam Committee that oversees the exams of anyone that is being  
2 certified in the area who has a certification CPE.

3 I am -- I was the president of the ISOES. That's the  
4 International Society of Occupational Safety and Health.

5 Q. You said you serve, if I heard you correctly, as the chair  
6 of the board that determines examinations for ergonomists?

7 A. I'm chair of the committee. I'm a member of the board.

8 Q. Chair of the committee, excuse me.

9 What's the scope of your work on that committee in terms  
10 of examinations? In other words, is that just for a particular  
11 state or particular country or is it broader than that?

12 A. It is -- most of the individuals candidates that apply for  
13 certification are in this country, a few of them in Europe; but  
14 it is international in flavor.

15 Q. Are there any other well-known ergonomists who serve on  
16 the BCPE Examination Committee?

17 A. At the moment there is one gentleman who is based in San  
18 Diego who I recruited recently who is on the board and on that  
19 committee, and the executive director herself is on the board.  
20 So there are three of us.

21 Q. Have there been other well-known ergonomists who have  
22 served on this committee in the past?

23 A. Yes.

24 Q. And who are they?

25 A. Dr. Marv Dainoff from Liberty Mutual. He was the outgoing

1 chair who was in the process of changing the written exam to a  
2 computerized exam. It's been thrown in my lap at the moment.

3 Q. Anybody else you can think of?

4 A. He was the chair for 15 years.

5 Q. I'm asking: Anyone else who served on the committee who  
6 is a well-known ergonomist?

7 A. Not -- not on that committee, no.

8 Q. All right. So for example, Dr. Khans, was he on that  
9 committee?

10 A. Dr. Khans, no.

11 Q. What other organizations have you belonged to or served  
12 on?

13 A. I belong to the IIE, the Institute of Industrial  
14 Engineers. I belong to -- where I'm a member. Human Factor  
15 Society, where I'm a member. It's called the Ergonomist  
16 Society in England. Now it's called the Institute of  
17 Ergonomists and Human Factors. I'm a fellow of that  
18 organization.

19 Q. Have you served on the editorial board of any journals  
20 within your field?

21 A. Served as the editor of the International Journal of  
22 Industrial Engineering for 15 years as the news editor of the  
23 International Journal of Industrial Ergonomics for 15 years,  
24 and now I'm on their board.

25 I'm also on the board of EHS, and I'm also on the board of

1 IIE Transactions and Ergonomics and Human Factors, editorial  
2 board.

3 Q. Have you received any professional award in the field of  
4 ergonomics?

5 A. I got the MMEU award from the IIE division. IIE -- the  
6 Institute of Industrial Engineering, the Work Sciences and  
7 Ergonomics Division a few years ago.

8 Q. Have you published any works in the field of ergonomics?

9 A. Yes, I have.

10 Q. And what have they included?

11 A. Excuse me, sir?

12 Q. What have they included?

13 A. What have they included?

14 Q. I didn't -- the works that you've published, what have  
15 they included?

16 A. They have included a variety of areas within physical  
17 ergonomics that I've published with my former students.

18 Q. Have you authored a textbook?

19 A. Yes, I have written a textbook.

20 Q. Is this the textbook (indicating)?

21 A. Yes, it is.

22 Q. Can you identify it to the Court, please?

23 A. That is the second edition of the textbook, *Applied*  
24 *Occupational Ergonomics*.

25 Q. Have you authored any articles on ergonomics?

1 A. Yes, I have.

2 Q. How many?

3 A. Within the area -- I have published about 180 articles.

4 Out of that, a majority of those are in the area of industrial  
5 ergonomics.

6 Q. And can you identify for the Court -- just a few examples,  
7 I'm sure, would suffice -- any publications that you think are  
8 relevant to your testimony here today?

9 A. I've published quite a few articles in the area of posture  
10 and what posture has to do with the development of MSDs. How  
11 posture has an affect on frequency and force. How sitting and  
12 standing, how would it affect the -- the maximum force you can  
13 apply in a sitting position and a standing position.

14 And I've done -- I've done -- most -- my PhD was in the  
15 area of the back. And after that, most of my work has been in  
16 the upper extremities.

17 Q. Do you know whether your works are generally viewed as  
18 authoritative in the field of ergonomics?

19 A. Some of my papers are. I wouldn't say all of them are. A  
20 few of them are.

21 Q. Have you been invited at all to present your papers to any  
22 professional groups?

23 A. I have been. I have been -- I have had some invited  
24 talks, yes.

25 Q. And do you know whether your textbook is used in any

1 American universities or colleges?

2 **A.** They are used in four or five universities here. The  
3 Spanish book is used a lot more.

4 **Q.** Better seller in Mexico?

5 **A.** In Mexico and South America, but I don't speak Spanish.

6 **Q.** Okay. By the way, if you don't mind -- I'm sure, because  
7 I was on curious. Your name is Fernandez, but you don't appear  
8 to be Hispanic. Could you just explain to the Court where your  
9 name comes from?

10 **A.** I'm from a Portuguese colony in India called Goa.

11 **THE COURT:** Called what?

12 **THE WITNESS:** Called Goa, G-o-a.

13 **BY MR. WOHL:**

14 **Q.** In Portugal?

15 **A.** It's a Portuguese colony in India called Goa.

16 **Q.** And that's where the name comes from?

17 **A.** That's where the name comes from and the accent, yes.

18 **Q.** An interesting factoid.

19 After you completed your PhD, did you teach in the area of  
20 industrial engineering and more specifically ergonomics?

21 **A.** I taught at Wichita State University for 13 years. I was  
22 a professor there. I resigned my position in 1999.

23 **Q.** Did you receive tenure?

24 **A.** I received tenure and I was a full professor when I left.

25 **Q.** And have you been involved with any other teaching



1 institutions?

2 **A.** On a part-time basis I do teach at Catholic University of  
3 America in Washington D.C. and occasionally I do have the short  
4 courses that I conduct in Mexico and some other universities  
5 here.

6 **Q.** Are you familiar with something called the Manufacturing  
7 and Innovation Design Center?

8 **A.** That is a center at Wichita State University that I was  
9 involved in creating with some colleagues of mine so that we  
10 could generate -- we could support faculty members doing  
11 research.

12 **Q.** And what particular area did that center involve itself  
13 with?

14 **A.** It was in manufacturing.

15 **Q.** Do you still teach in the ergonomics field? I think you  
16 already answered that.

17 Go ahead and answer again.

18 **A.** I do.

19 **Q.** And was that at Catholic University?

20 **A.** Roman Catholic.

21 **Q.** Thank you. I didn't mean to repeat myself.

22 What has been your professional experience since leaving  
23 Wichita State?

24 **A.** Excuse me, sir?

25 **Q.** Your professional experience, that is non-educational

1 experience since leaving Wichita State?

2 **A.** I'm involved in a consulting company. I manage a group of  
3 industrial engineers.

4 **Q.** Before we get to JF, did you work at a company called  
5 Exponent?

6 **A.** I did work at a company called Exponent for four years,  
7 from 1999 to 2003.

8 **Q.** And what kind of company was Exponent?

9 **A.** Exponent did -- they did a variety of jobs. They were  
10 engineering and scientific consultants. They are based in the  
11 Bay Area here, but they have -- they have offices all over the  
12 country.

13 **Q.** What was the field of work that you engaged in while  
14 working at Exponent?

15 **A.** Human factors in ergonomics.

16 **Q.** Is human factors considered an analogous phrase to  
17 ergonomics?

18 **A.** In this country it is.

19 **Q.** Have you done any consulting work?

20 **A.** I have consulted in the area of ergonomics.

21 **Q.** And I certainly don't want you to disclose anything  
22 that -- by contract or otherwise is deemed confidential, but if  
23 you can tell us which organizations have you consulted with and  
24 the general nature of the work that you have done for them?

25 **A.** I have consulted -- I have consulted in a number of

1 different industrial sectors; from the food industry, to the  
2 aircraft industry, to the pharmaceutical industry, to small  
3 manufacturing.

4 I've worked for the government. When I say "the  
5 government," I'm talking about last year I did some work for  
6 the architects from the Capitol in Washington D.C. I worked  
7 extensively with the U.S. Army evaluating, as we call it, stuff  
8 for them before they send it to theater, looking at things that  
9 people develop and seeing if it is acceptable for humans to use  
10 efficiently in the field.

11 Q. Have you done any specific work in connection with the  
12 government in an advisory role with regard to ergonomics?

13 A. I worked for NIOSH. I worked --

14 Q. Sorry. Can you just tell the Court what NIOSH is?

15 A. NIOSH is the National Institute for Occupational Safety  
16 and Health. It's part of CDC, the Department -- U.S.  
17 Department of Health and Human Services.

18 Q. Please define what CDC is?

19 A. Center for Disease Control -- centers for Disease Control.

20 Q. Okay. And what does NIOSH do?

21 A. NIOSH is the guideline -- research and guideline setting  
22 body of the U.S. government for -- as it relates to  
23 occupational safety and health.

24 Q. And when did you work with NIOSH?

25 A. I worked as a -- on my sabbatical in 1992, '93. I was

1 involved in what they call the criteria document for ergonomics  
2 that was a precursor to what they were hoping OSHA would come  
3 out with the ergonomic standard.

4 Q. And do you recall what your title was with NIOSH at the  
5 time?

6 A. I was an NRC Senior Research Fellow.

7 Q. Have you done any work with the Occupational Health and  
8 Safety Administration, or OSHA?

9 A. Yes, I have. There was something else I wanted to mention  
10 about NIOSH.

11 Q. Please do. Please do.

12 A. While I was at NIOSH, I also was involved in what they  
13 call the lifting guide. That is, the standard -- not the  
14 standard. That's the guideline that OSHA uses now to cite  
15 companies if somebody is -- if they are over the limit for  
16 lifting items. I was involved in that.

17 And, in fact, I'm one of the seven reviewers of that  
18 document that is now very well -- widely used.

19 Q. Okay. And then OSHA, what work have you done with OSHA?

20 A. OSHA, I was involved in OSHA as the consulting --  
21 consulting ergonomist when they were involved in litigation  
22 against a chicken -- a poultry processing facility, one of the  
23 largest in this country, and they had cited this facility for  
24 ergonomic vials violations. I worked for OSHA as a consultant.

25 Q. Did your work for OSHA address at all issues of standing

1 or sitting by employees at the work station?

2 A. Yes, it did.

3 Q. Have you worked with any private companies with regard to  
4 ergonomic issues?

5 A. Yes, I have.

6 Q. Are you at liberty to mention any of those?

7 A. Name of companies?

8 Q. Yes.

9 A. Sanofi-Winthrop, Hay and Forage, Pizza Hut, Raytheon,  
10 Cessna, Ditch Witch. I'm sure there are others. I don't quite  
11 remember.

12 Q. And did any of those engagements involve issues of sitting  
13 or standing by employees in the workplace?

14 A. Some of them did.

15 Q. Now, you were starting to tell me -- and then I  
16 interrupted to have you finish some other issues -- your work  
17 at J.F. Associates.

18 So when did you form J.F. Associates?

19 A. In 2003.

20 Q. And what type of work does J.F. Associates perform?

21 A. We do engineering -- industrial engineering consulting for  
22 companies, government and law firms.

23 Q. And how large is J.F. Associates?

24 A. We are five.

25 Q. And do you also do any work through J.F. Associates in

1 connection with law firms and litigation?

2 A. Yes, we do.

3 Q. What type of work do you do in that regard?

4 A. I do work in the area of ergonomics and I do work in the  
5 area of time and motion study.

6 Q. Have you ever worked on the side of the government or  
7 plaintiff in a case, in an ergonomics case?

8 A. For the government?

9 Q. Either for the government or for the plaintiff. That is a  
10 party asserting a claim or violation as opposed to the  
11 defendant.

12 A. Yes.

13 Q. Can you give any examples of those?

14 A. The two OSHA cases; one was against Hudson, which was  
15 against Tyson's, and the other was -- ergonomics you mentioned,  
16 right? And the other was Northern States in Omaha. That was  
17 for the government.

18 And I've got -- I worked on a number of FLSA -- sorry,  
19 F-E-L-A, FELA cases. That's the railroad cases for the  
20 plaintiffs.

21 Q. So not an ergonomics case, but a case where you worked on  
22 behalf of the plaintiffs? Did I hear you correctly?

23 A. These are ergonomic cases for the plaintiffs.

24 Q. Oh, they are ergonomics cases. Excuse me. Thank you.

25 Have you also worked on the side of the defendants in

1 ergonomics cases as well?

2 A. Yes, I have.

3 Q. Are there any particular groups of employed populations  
4 that your work has concerned overtime?

5 A. Particular groups?

6 Q. Yes, populations of employees. In particular, populations  
7 that you particularly worked with?

8 A. Are you --

9 Q. In your ergonomics work.

10 A. In litigation or in general?

11 Q. General.

12 A. In general I worked with the disabled. I worked with the  
13 aging population, the normal population. I worked with the  
14 defense. I think the population I worked the longest with is  
15 the disabled.

16 Q. Okay. Have you ever been qualified to give testimony as  
17 an expert before?

18 A. Yes, I have.

19 Q. Okay. And counting both in court and deposition time, how  
20 many times have you testified as an expert in cases?

21 A. Both together?

22 Q. Yes.

23 A. Close to 30.

24 Q. To your knowledge, has a Court ever rejected your  
25 testimony as an expert in the sense of not accepting your

1 qualifications as an expert to testify?

2 **A.** No -- excuse me, sir. I think I might have misspoke. Did  
3 you ask me how many times I have been involved in testimony in  
4 general or in ergonomic cases?

5 **Q.** Well, let's break that apart then.

6 So how many times in ergonomics cases have you testified  
7 as an expert either in court or in a deposition?

8 **A.** In a deposition, five, maybe six times. In court never.

9 **Q.** This is your first time in that regard?

10 **A.** In ergonomics case, yes.

11 **Q.** And in a non-ergonomics case how many times have you  
12 testified in court as an expert?

13 **A.** Four or five times.

14 **Q.** How many times in a deposition in such a non-ergonomics  
15 case?

16 **A.** Close to 30; 25, 30.

17 **Q.** Thank you.

18 Now you previously gave the Court a definition of  
19 ergonomics. I would like to explore that a little bit further.

20 Is the purpose of ergonomics to further employee safety  
21 and well-being without regard to any other factor?

22 **A.** It's dual. It's ergonomics is to improve productivity and  
23 improve health and safety.

24 **Q.** So what considerations would an ergonomist want to take  
25 into account in trying to achieve what you just said; that goal



1 of improving both productivity and well-being.

2 **A.** You have to look at the task that is being performed and  
3 you look -- you look at the task and you evaluate it from an  
4 ergonomics perspective. And then you have to evaluate it also  
5 from an industrial engineering perspective.

6 And when I say "an industrial engineering perspective,"  
7 you look at the speed. You look -- you look at the -- you  
8 know, the parts produced and you find out the value and  
9 non-value added times that -- and then, of course, you do the  
10 other industrial engineering aspects, where I was meaning  
11 facility layout; find out what's the best layout, what's the  
12 best flow and so on. That is the industrial engineering  
13 aspect.

14 When you're doing the ergonomics aspect of things, you're  
15 looking at the forces. You're looking at the postures. You're  
16 looking at the repetitions. You're looking at the force,  
17 posture, repetition, the durations. You're looking at how the  
18 body parts are interacting, what's happening with the task.  
19 You're looking at the job itself. What's the geometry of it  
20 and what's happening.

21 And so based on that, then you go ahead -- you try to  
22 match the demands of the task with the human capacities because  
23 humans come in different shapes and sizes. We come -- so  
24 anthropometry-wise we're different. Strength-wise we're  
25 different. And so we operate very differently, each of us.

1 Q. So what type of factors would you want to take into  
2 account in trying to come up with a recommendation for an  
3 ergonomic solution for a particular job?

4 A. The process that I would typically take is I go and  
5 understand the task demands. Just like we did when we were  
6 working for the AOC, which is the Architects Of the Capitol.  
7 I went and videotaped the employees, found out the amount of  
8 forces and the postures they were involved in, the equipment  
9 they were using and spoke to management and found out their  
10 constraints; whether they had the budget to make the changes,  
11 what were they looking for, you know, where the individuals had  
12 to work. Then based on that, based on all this analysis came  
13 up with solutions.

14 Q. Would an employer's expectation of a level of productivity  
15 from the employee, would that be a relevant factor in your  
16 consideration?

17 A. It is a factor. Very often these days as the economy gets  
18 tough, management does not want to lose on the productivity  
19 numbers. But many individuals in the area of ergonomics who  
20 have worked in the area long enough, they realize that  
21 ergonomics, good ergonomics means you can improve productivity.

22 Q. Would you want to consider the current work station  
23 configuration in your analysis?

24 A. The work station has to come in the analysis because it's  
25 the fit and the function, as I mentioned. You want to see if

1 the worker can fit there first and whether the worker can  
2 function there.

3 So you would -- the geometry of the workplace, of course,  
4 would come into -- take into consideration.

5 Q. Would you want to consider the expense of any  
6 modifications to the work station?

7 A. When you're talking about the expense, you're assuming,  
8 sir, that the design that you are recommending, whoever is  
9 recommending, is the final design.

10 Is that what -- one would have to consider the cost in the  
11 end of what the final design is like; but those iterations to  
12 get to that final, it takes -- it takes quite a bit of work.

13 Q. Have you ever been given an unlimited budget to design  
14 whatever you want regardless of the resulting cost?

15 A. No.

16 Q. Would you look at whether any changes to how the employee  
17 does the job would have any impact on other employees; that is,  
18 on other coworkers?

19 A. Have I looked at that?

20 Q. Would you?

21 A. Yes.

22 Q. To the extent that their -- it's a service job that they  
23 are interfacing with customers, would you want to consider what  
24 impact any changes might have on customer perceptions?

25 A. Yes. One would have to look at that as well.

1 Q. And do you recall in your deposition in this case that you  
2 testified an ideal ergonomic solution would be if an employee  
3 could sit for part of the time and stand for part of the time?

4 A. Yes, I did.

5 Q. Can you explain what you meant by that?

6 A. In an ideal situation, as I've put in my textbook, where  
7 you have no cost constraints -- well, in an ideal situation  
8 most ergonomists like me will recommend a sit and a stand  
9 situation because that's best.

10 But the reality is you have to take into consideration the  
11 task, what task they are performing, what's the cost, the space  
12 availability, you know, the health and safety of the worker.  
13 I'm not sure if I said productivity. I don't have any notes.  
14 Yes, sir.

15 Q. And were you taking any of those other factors into  
16 account when you said the ideal situation would be sit/stand?

17 A. At that point, I was not looking at all of that because I  
18 had not perceived it that way.

19 Q. Okay. Now, throughout the trial the Court has been  
20 hearing testimony both from expert and from lay witnesses about  
21 the differences between sitting and standing while working.

22 Can you explain to the Court in your view what are the  
23 advantages or disadvantages about sitting versus standing in  
24 performing a job?

25 A. There are advantages of both. The advantages of standing

1 is you can apply more force. It's easy on the upper body.

2 When I say "more force," because very often there is more  
3 flexibility. There is an upper body -- if you want to apply  
4 force, you can apply force with your upper body when standing.

5 You can move around the place. That's another one. You  
6 don't need the knee clearance. It's a problem to operate a  
7 foot control, which is not applicable here, but that's one of  
8 the things we talk about in a manufacturing situation. That's  
9 not acceptable when you're standing.

10 Sitting is better because it delays fatigue. You can  
11 stand up.

12 If you're only standing, they say, without stepping aside,  
13 what we call static standing, for only half an hour. You can  
14 sit down for one hour, just sit down, static sitting.

15 And so one asks -- usually my students want to know is:  
16 How the hell do people survive sitting? The alternate when  
17 we're sitting down, we're moving a bit as well. Because when  
18 we're doing that, we are replenishing the disk in our back.

19 I'm sorry, sir. I think I might have gone off track.

20 **Q.** I think you're certainly starting to give us a good idea  
21 about that.

22 So are there particular muscles that you would see used  
23 more predominantly when you're standing working as opposed to  
24 when you're sitting?

25 **A.** There are different muscles being activated, of course,

1 but I was -- I was talking about sitting.

2 When you're sitting -- when is sitting recommended?

3 Sitting is recommended when all items are within reach, when  
4 you're lifting less than 10 pounds or handling less than  
5 10 pounds. Some guidelines say lifting 10 pounds, some say  
6 handling 10 pounds.

7 Another one is when there is -- when there is knee  
8 clearance, you can sit and do it. So there's knee clearance.

9 Extended reaches. Ten pounds.

10 When items are more than six inches above the work  
11 surface, you don't recommend lifting. So when there are these  
12 high reaches and you're doing things of this nature, you don't  
13 do it sitting down.

14 Sitting, of course, as I mentioned earlier, the advantage  
15 is fatigue delays. You can sit down and do things longer.

16 **Q.** Is there any threat to health by prolonged sitting?

17 **A.** Prolonged sitting, yes. The same threat that you would  
18 have for prolonged standing, which is venous blood pooling,  
19 edema and so on.

20 **Q.** Can you explain to the Court -- I don't know if the Court  
21 has heard that term before. What is venous blood pooling. In  
22 this regard it's spelled v-e-n-o-u-s?

23 **A.** Yes. You have veins and arteries. Veins are basically --  
24 excuse my terminology as an engineer.

25 It's the tubing that basically gets the -- instead of the

1 arteries pump blood away from the heart, the veins get the  
2 blood back into the heart. And so -- and they don't exert  
3 pressure.

4 The only way you -- the only way you get the blood back is  
5 something called the muscle pump. And this -- if you walk,  
6 that's one of the reasons you can get -- you can move.

7 That's one of the reasons that individuals that have --  
8 sit down for long period of time, about 60 percent of your  
9 blood can accumulate in the low extremities. That's why  
10 individuals that are paraplegic very often they have venous  
11 blood pooling.

12 And if you notice individuals that are disabled very often  
13 in wheelchairs, when you're sitting with them and talking with  
14 them, they all of a sudden -- if they are paraplegic, not  
15 quadriplegic -- they will pick up their legs and put it on the  
16 counter so the blood can flow back. They have no way of  
17 walking. So they have no way of getting that block back into  
18 the circulation mode.

19 Q. Is this a similar issue with airline passengers on long  
20 flights?

21 A. Yes, it is.

22 Q. Is there any cardiovascular risk that's been identified  
23 with prolonged sitting?

24 A. For prolonged sitting, yes. And that particular study was  
25 for an extended sitting. It was not just for a few hours.

1 Q. Can you define for the Court the term musculoskeletal  
2 disorder or MSD?

3 A. MSD is also called cumulative trauma disorders.  
4 Disorders, it's an umbrella term that -- it's physical injuries  
5 that develop over a period of time. They are caused by  
6 excessive force, high repetition, awkward postures, and  
7 duration -- and work duration, duration of activity.

8 They effect different muscle groups or different parts of  
9 the body from the neck to the shoulder. Frozen shoulder is an  
10 example. Tendonitis, carpal tunnel, these are all examples of  
11 musculoskeletal disorders.

12 Q. Does sitting while working present any particular risk of  
13 MSD?

14 A. Sitting while working has been documented to increase the  
15 risk of upper extremity MSDs, especially shoulders. Shoulder  
16 and neck it's been documented.

17 Q. And how would the symptoms manifest themselves if an  
18 employee experienced that or developed that?

19 A. It's -- as I mentioned, it develops over a period of time.  
20 So it's nothing that happens overnight.

21 Initially there is going to be discomfort and pain. And  
22 if they work through it, carry on working with that discomfort  
23 and pain, that's going to manifest itself with swelling. And  
24 that swelling then, if you don't take care of it, it then  
25 becomes an injury because there is not enough time for it to



1 heal. These microtraumas need time to heal.

2 Q. Are you saying begin to develop without the employee being  
3 aware of it and then only realize it sometime later?

4 A. Initially it's discomfort. Very soon after discomfort  
5 they are going to start realizing it, but they may not realize  
6 it initially. There is a trigger and everyone has a different  
7 trigger point.

8 Q. You mentioned NIOSH. Does NIOSH say anything about MSD  
9 risk?

10 A. NIOSH in 1997 did a thorough evaluation. They looked at  
11 hundreds and hundreds of papers, and they researched papers and  
12 they documented the -- documented the risk.

13 First of all, they said that there is -- the risk factors,  
14 there are some risk factors that affect MSDs. And some risk  
15 factors affect it more than others.

16 And, therefore, different body parts, they went through it  
17 whether force and posture and repetition, which of these would  
18 affect which body part and how much.

19 MR. WOHL: If I can approach the witness, your Honor?

20 THE COURT: Yes.

21 BY MR. WOHL:

22 Q. I'm going to show the witness what's previously been  
23 marked and I believe admitted as Trial Exhibit 244.

24 (Document was tendered to the witness.)

25 Q. Can you take a look at that, please and explain to the

1 Court what that is?

2 **A.** This Exhibit 244 is the "Musculoskeletal Disorders and the  
3 Workplace Factors." It's a publication by NIOSH numbered  
4 97141. This is the second printing.

5 **Q.** Does that bear on what we just talked about?

6 **A.** Excuse me?

7 **Q.** Does that bear on what we just talked about?

8 **A.** Yes, sir.

9 **MR. DOSTART:** Your Honor, we're going to object to  
10 this. This is outside of Dr. Fernandez's report.

11 **THE COURT:** Is that true?

12 **MR. WOHL:** I don't think so.

13 **MR. DOSTART:** This is not included in his report, your  
14 Honor.

15 **THE COURT:** Show me where it's in the report.

16 **MR. WOHL:** All right, your Honor. Let me take a look.

17 **MR. DOSTART:** It's not in the report, your Honor.

18 **BY MR. WOHL:**

19 **Q.** Just to speed things up, Dr. Fernandez. Do you recall if  
20 these were cited in either your first report or second report?

21 **MR. DOSTART:** I Think citing it in the report would  
22 not be sufficient. Included within the report.

23 **MR. WOHL:** Your Honor, that would not be a fair  
24 distinction. He obviously he relied upon it.

25 **THE COURT:** No. It depends. Every statement he makes

1 on direct examination is supposed to be in the report. It can  
2 be -- it doesn't have to be the exact words, but it has to be  
3 close.

4 If all I did was cite to something, that's not enough to  
5 sustain testimony about a report.

6 **MR. WOHL:** He's taking it way.

7 Excuse me, your Honor. I've got my own copy.

8 (Brief pause.)

9 **THE COURT:** Now, sometimes on cross-examination the  
10 cross examiner opens the door to all kinds of things, but we're  
11 not to cross examination yet.

12 **MR. WOHL:** I don't know, your Honor --

13 **BY MR. WOHL:**

14 **Q.** Excuse me, Dr. Fernandez, if you can help me here.

15 Basically what the judge is concerned about is whether in  
16 your body of your report do you talk about the matter that's  
17 covered by that NIOSH publication? If so, could you just  
18 direct us to that?

19 **A.** Table 1.

20 **Q.** Table 1. Is this the September 6th report, which has been  
21 marked Exhibit 213?

22 **A.** Table 1.

23 **MR. WOHL:** That's it, your Honor. And NIOSH is cited  
24 in the bottom of the table.

25 **THE COURT:** What do you say to that counsel?

1           **MR. WOHL:** It's right there.

2           **MR. DOSTART:** As long as the witness is going to  
3 testify just to the chart that's in the report, we have no  
4 objection whatsoever.

5           **MR. WOHL:** Your Honor, that's not what it says. It  
6 says NIOSH has a publication entitled "Elements of Ergonomics  
7 Program General Workstation Design That Includes the Following  
8 General Workstation Design Principles." And then it ticks them  
9 off.

10           I think that's what the witness is talking about. So I'm  
11 not sure what the problem is.

12           **MR. DOSTART:** Just to be clear your Honor. I'm not  
13 trying to be obstreperous. As long as it's in the report, as  
14 Paragraph 13 of your Honor's guidelines for civil bench trials  
15 indicates, he can discuss it.

16           I was afraid that as Mr. Wohl did with Dr. Johnson, there  
17 might be an attempt to go outside of what would be permitted  
18 pursuant to those guidelines and I was just trying to make sure  
19 we didn't get there before --

20           **MR. WOHL:** Excuse me, your Honor. Dr. Johnson's exam  
21 was cross examination, so I was allowed to do what I wanted to  
22 do.

23           This is direct exam, and I've stayed within the report. I  
24 don't understand why we're even having this discussion.

25           **THE COURT:** As long as what he's saying is in the

1 report, it has to be almost the exact words. Not exactly, but  
2 close to it. You cannot -- merely because the report is  
3 mentioned doesn't mean you get to refer to anything that's in  
4 that report. It has to be referenced in the report. If it is,  
5 then he can testify to it.

6 **MR. DOSTART:** Thank you, your Honor.

7 **THE COURT:** I cannot -- that's the best guideline I  
8 can give you. Keep that in mind as you go through it.

9 All right. The objection is overruled for the time being.

10 **BY MR. WOHL:**

11 **Q.** And while we're at it, Dr. Fernandez, if we could, let me  
12 just show you Exhibit 213 so you can confirm this as your  
13 report for your -- your opening report I should say.

14 (Document was tendered to the witness.)

15 **A.** Yes, it is my report.

16 **Q.** So what does NIOSH say about the relationship between MSDs  
17 and certain physical factors?

18 **A.** I'm just going to read off my report here. It says:

19 "NIOSH concluded that a" --

20 **THE COURT:** Wait. Read slowly. If you're going to  
21 read, you've got to read slowly so I can understand and the  
22 court reporter will get it.

23 **MR. DOSTART:** Your Honor, I would prefer that he be  
24 asked if he can remember and then if he cannot remember --

25 **THE COURT:** Well, look. He's trying -- if he

1 doesn't -- you know, on the fly you object on the ground that  
2 it's not in the report.

3 If he reads it exactly the way it is in the report, you  
4 object on the ground that his memory doesn't need to be  
5 refreshed.

6 I'm going to let him do it in this one instance. Go  
7 ahead. Read what you have in your report.

8 **MR. WOHL:** Thank you, your Honor.

9 **A.** (As read)

10 "NIOSH concluded that a large body of credible  
11 epidemiological research exists that shows a  
12 consistent relationship between MSDs and certain  
13 physical factors."

14 **THE COURT:** Next question.

15 **BY MR. WOHL:**

16 **Q.** You then have a chart that you call Table 1. Can you  
17 summarize for the Court what Table 1 shows?

18 **A.** Table 1 basically has the various body parts and it shows  
19 by the -- for the neck and shoulder, by the force, repetition,  
20 posture, vibration as a strong evidence that there are --  
21 there's strong evidence, evidence, insufficient evidence or no  
22 evidence.

23 In the case of neck and shoulder, there is strong evidence  
24 that posture has a factor to play.

25 And repetition and force has -- there is evidence with the

1 three pluses as they put it out here.

2 Q. How is that relevant to the issue of sitting versus  
3 standing while performing work?

4 A. In sitting and standing there are two -- most of these, if  
5 you notice, they have repetition, posture and by -- repetition,  
6 posture, forces and vibration.

7 In sitting and standing the two factors that come into  
8 play are force and posture. And if in a -- the posture and  
9 forces will change from sitting to a standing position.

10 Q. And can you explain that a little bit further for the  
11 Court, the differences between the two, force and posture, and  
12 how does that relate to sitting versus standing?

13 A. In a standing position, your force you can apply is a lot  
14 -- is higher. I shouldn't say a lot higher, is higher than in  
15 a sitting position.

16 Q. Why is that?

17 A. That is documented. Because you can -- you use different  
18 muscle groups and so on and so forth.

19 So you -- so there is a -- and when you're designing to  
20 reduce risk, you are designing for one-third of your maximum or  
21 15 percent of your maximum. So if your maximum is going to  
22 decrease and you're required to do the same work standing or  
23 sitting, the risk is going to increase if you're sitting and  
24 doing it.

25 Q. And then please explain what you mean by "posture" and how

1 that relates to this issue of sitting versus standing?

2 **A.** Posture will change -- some body postures, not all body  
3 postures. Some postures will change while you're in a seated  
4 position. Your shoulders will be abducted, or moving forward,  
5 and those postures would -- would bear.

6 And so in this particular case, like it says, posture has  
7 a major factor. This is just one of the studies.

8 And then another one also talks -- there are some other  
9 studies that have been done that said upper extremities do  
10 cause -- posture has an effect to play as it relates to  
11 shoulder and neck.

12 **Q.** Are you familiar with the term "lordosis"?

13 **A.** Lordosis has to do with the back. It has nothing to do  
14 with the shoulder.

15 **Q.** I understand. But what does lordosis, if anything, have  
16 to do with posture?

17 **A.** Lordosis is the curvature of the low back. When you're  
18 standing, you have that low back lordosis. When you're sitting  
19 down and your back is not supported, you do not have that  
20 lordosis.

21 And so basically what happens is you go ahead and create  
22 compressive and sheer forces in your low back. This happens  
23 when your back is not supported and you do not have a back  
24 rest. You provide a back rest and you do not have -- then you  
25 get that lordosis. The objective is to get the lordosis.



1       Why does it happen? Because when you're sitting down and  
2 your back is not supported, your pelvis rotates backwards.  
3 When it rotates backwards, you're not -- you don't get that  
4 lordosis.

5       That's why very often when you sit down for a long period  
6 of time without a back rest, an effective back rest -- a back  
7 rest need not be something that you just have here. If it  
8 doesn't touch your low back at a particular point and provide  
9 support, it's not really an effective back rest.

10 Q. Are you familiar with someone named Don Chafen?

11 A. Yes, I am.

12 Q. And is he a recognized expert in the area of ergonomics?

13 A. Yes, he is.

14 Q. And has he done any work in the area of what the pressure  
15 on the lower back is or lumbar between sitting and standing?

16 A. He has reported some of those studies by Anderson in 1974.

17       **MR. WOHL:** May I show the witness what's been marked  
18 as Exhibit 228-A?

19       (Document was tendered to the witness.)

20 **BY MR. WOHL:**

21 Q. Please tell the Court if you recognize that document.

22       Let's start, though, just so I don't run afoul: Is this  
23 document also referenced in your report, Chafen?

24 A. I refer to Chafen and I refer to Anderson 1974, A and B.

25 Q. Could you direct us to that, because Mr. Dostart has a

1 doubt about this and it's been --

2 **A.** The reference is -- is he asking for the reference, the  
3 reference list?

4 **MR. DOSTART:** No. I'm asking for where in your report  
5 it appears. I read it many times, but it's quite dense.

6 (Brief pause.)

7 **BY MR. WOHL:**

8 **Q.** Is it on Page 3, Doctor?

9 **A.** I'm looking. I'm not sure where it is.

10 **Q.** Can I direct your attention, in the interests of time, to  
11 Page 3 of your report?

12 **A.** Yes. Page 3.

13 **Q.** Fourth page.

14 **A.** Yes, sir.

15 **Q.** Do you see the reference?

16 **MR. DOSTART:** I do. Okay.

17 **BY MR. WOHL:**

18 **Q.** All right. Thank you.

19 Can you explain to the Court what Dr. Chafen found in this  
20 regard?

21 **A.** Dr. Chafen in this particular --

22 **Q.** Go ahead. Please explain to the Court.

23 **A.** Can I be showing him?

24 **Q.** Would you prefer it on the Elmo?

25 **THE COURT:** You can hold it up, if that's the way you

1 would like, and use it as an illustrative guide.

2 **THE WITNESS:** That's fine with me, sir.

3 **THE COURT:** Sure, go ahead. What is it that you're  
4 trying to explain?

5 **A.** Well, what Chafen was saying here is as your arm is  
6 outreached -- as the arm is extended, what happens is the time  
7 for fatigue increases. The time that you can -- the average  
8 time for a young male to reach significance muscle fatigue  
9 decreases.

10 So from 50 is much less than 40 is much less than  
11 30 inches; 50 is less than 40 is less than 30.

12 And the amount of weight that you can lift is also  
13 decreasing. So the further away you are, one, the less weight  
14 you can lift. That's biomechanics --

15 **MR. DOSTART:** I'm going to object to this as outside  
16 the scope of the report. The report only addresses the fatigue  
17 issue, not the weight issue.

18 **BY MR. WOHL:**

19 **Q.** Is this relevant to fatigue or is this just to strength?

20 **A.** Fatigue is because of the weight. This is the --

21 **THE COURT:** Well, does the word "weight" appear in  
22 your report?

23 What you're holding up is his article, right?

24 **THE WITNESS:** That's right, sir.

25 **THE COURT:** All right. Well, that's not your report.

1 What we have to go by is what's in your report.

2 So you can repeat to me what it is you say about his study  
3 in your report, but if you only refer to one of those items,  
4 you can't go out and then now enlarge upon that and put in two  
5 items.

6 **THE WITNESS:** That's fine, sir.

7 **THE COURT:** So just stick with the one item, which  
8 sounds like it's the fatigue point.

9 **THE WITNESS:** Yes.

10 **THE COURT:** Okay. So let's stick with fatigue.

11 **A.** As the reach distance increases, the endurance time for  
12 shoulder, muscle fatigue decreases.

13 **BY MR. WOHL:**

14 **Q.** From an ergonomics perspective, what would be the key  
15 considerations in your view as to -- in determining whether a  
16 seat is appropriate for employees?

17 Do I need to restate that question, Doctor?

18 **A.** Yes, please.

19 **Q.** From an ergonomics perspective, what are the  
20 considerations that you think would be key in determining  
21 whether a seat is appropriate for an employee?

22 **A.** Whether there is foot -- the number -- the job requires  
23 weights to be lifted, whether there is enough of a knee  
24 clearance, whether there is movement involved, whether the job  
25 is six inches above the work surface. These are some of them,

1 yes.

2 Q. How would weight be a relevant consideration in whether a  
3 job should be performed seated versus standing?

4 A. As weight biomechanics states, that as weight increases --  
5 as weight and distance increases, the movements increase. So,  
6 and there is also guidelines that state: Do not handle items  
7 more than 10 pounds.

8 Q. While seated, you mean?

9 A. While seated.

10 Q. How does knee clearance relate to the issue of whether the  
11 employee can sit or not?

12 A. There is no knee clearance of sitting away. And if you're  
13 sitting away, you either can't reach or if you do attempt to  
14 reach, you would be bending over and then your back is in some  
15 awkward or longer positions. So you do need knee clearance so  
16 you can come in close.

17 Q. How does movement relate to whether an employee can sit or  
18 not?

19 A. Movement is basically if your job requires you to move  
20 from one place in the work station or the work area to another,  
21 you've got to move.

22 If the job requires you to move, you -- and you're sitting  
23 down, you really -- you have to then get off the seat and move  
24 the seat and then move and then go to the other work station.

25 Q. Are you familiar with the concept of no value add or no

1 value added in ergonomics?

2 **A.** No value added is a concept in ergonomics and  
3 manufacturing, yes.

4 **Q.** Is that something that's considered undesirable from an  
5 ergonomic point of view?

6 **A.** Yes.

7 **Q.** And would having to get off of a seat and move yourself or  
8 the seat or both in order to perform the next task, would that  
9 be considered no value added?

10 **A.** It would be consider no value added, yes.

11 **Q.** You also mentioned about working, if I heard you  
12 correctly, six inches or more above the work counter --

13 **A.** Yes.

14 **Q.** (Continuing) -- as being a relevant consideration.  
15 How does that relate to sitting?

16 **A.** That goes hand-in-hand with don't work above -- they are  
17 addressing the same issue of overhead reaching and working at  
18 elbow -- shoulder height, trying to ensure that you do not --  
19 you try to limit your upper extremity problems of the shoulder.

20 So the quote basically said if it's more than six inches,  
21 they should not be doing it sitting.

22 **Q.** In light of these considerations, in your own view when  
23 would you recommend that an employee could be seated while  
24 working? That is, are there particular types of jobs that you  
25 would say that would be appropriate for the employee to sit?

1 A. There are jobs, and I have recommended seats.

2 Q. And what would those be?

3 A. Basically there's not -- there is not much extended -- the  
4 extended reach -- everything is within normal, what we call the  
5 normal area.

6 This is the normal work area (indicating). This is the  
7 maximum work area (indicating). So if it's within the normal  
8 work area, there are no extended reaches.

9 Q. Can you give the Court some examples of jobs that you  
10 believe could be performed ergonomically in a sound way in a  
11 seated position?

12 A. I have provided seats in a manufacturing environment  
13 where -- on the floor. Some jobs could have had seats and some  
14 jobs didn't. It didn't sit very well with the workers, but I  
15 was not going to give -- recommend a seat so that some of them  
16 could get hurt. I was only going to recommend seat if it was  
17 appropriate.

18 So some jobs where there was -- where there was no weights  
19 being lifted, you know, and the parts were right in front of  
20 them, introduced in front of them so there was no extended  
21 reaches, there's no movement involved, I provided them with  
22 what -- with not really a -- I wouldn't call it a seat, sir. I  
23 provided them with a butt rest or a high stool. A sit/stand  
24 stool, that's what I called it.

25 Q. Now, this is a highly technical term, so let's get it on

1 the table, butt rest; is that correct?

2 A. It's basically --

3 Q. Embrace it. Don't be ashamed of it.

4 A. That's a term that is used in the textbooks, sir. Yes, it  
5 is.

6 Q. Thank you.

7 Any other examples of jobs, even if you didn't personally  
8 consult with an employer about them, but other types of jobs?  
9 Just give the Court an idea of other types of jobs that an  
10 employee could perform in your view in a seated position  
11 ergonomically correct?

12 A. A programmer. Somebody involved in a -- a developer,  
13 computer developer writing software programs.

14 Q. How about a receptionist?

15 A. Receptionist is a tough one. It all depends what task  
16 they are performing. Some receptionists perform a lot of their  
17 tasks at the work station. Some receptionists are going to be  
18 spending a lot of time out of the work station, in and out.  
19 But if they are spending -- so it depends.

20 Q. How about a bank teller?

21 A. Bank teller, yes. If they are not moving too much, yes.

22 Q. Are you aware of any other authorities who would agree  
23 with your view as to what jobs in general would be  
24 appropriately performed seated as opposed to standing?

25 A. Most ergonomists would.



1 Q. And what types of jobs would you recommend that the  
2 employee stand to perform in contrast?

3 A. Stand, when there is movement involved. It's easier to do  
4 it standing. When you have to apply forces, you do it  
5 standing.

6 Q. Can you give an any examples of jobs that you think would  
7 be better performed standing?

8 A. That I have -- that I see? You're talking in general?

9 Q. Sure.

10 A. On the floor very often the tasks involve different work  
11 stations. And as they are moving along, they have to move  
12 along with the -- with the part. And it's very difficult for  
13 them to provide them any sort of a seat, a high stool or  
14 anything of that nature. So you basically provide them with an  
15 antifatigue mat or something that would decrease their fatigue  
16 in their lower extremities.

17 Q. Right. We'll talk more about it in a moment.

18 Going back to the butt rest or lean stool, can you just  
19 describe, just so we're clear, to the Court what that is? And  
20 specifically how does that contrast from a seat?

21 A. Standing or standing erect, it's 180 degrees. Sitting is  
22 90 degrees. And then a butt rest or a lean stool, it's about  
23 135 to 142 degrees. So it's sort of this position here  
24 (indicating). The muscles in the back and front are both in  
25 equilibrium. Plus, you are getting the lordosis. But you have

1 to have that 135 to 142, 142 degrees.

2 So that's what we were recommending in the manufacturing  
3 environment, those butt rests, those high stools and so on.  
4 Those were high.

5 Q. Can you give an example -- I'm sorry. You said  
6 manufacturing you recommended that?

7 A. I did that in the -- in a pharmaceutical.

8 Q. Did you recommend that in a chicken processing facility as  
9 well?

10 A. Yes, I did.

11 Q. And so more specifically why did you feel that in that  
12 instance a lean stool or butt rest was the appropriate  
13 solution?

14 A. The person was standing up, standing on a metal -- on  
15 metal grate. That's what they were standing and working. The  
16 chicken was coming right in front of them on an assembly line.  
17 All they were doing -- I shouldn't say all.

18 What they were working on was right in front of them and  
19 so they were not -- there was no extended reaches. There was  
20 no movement around, they did not have to move. It was right in  
21 front of them. They could either do it standing or they could  
22 do it sitting.

23 In that situation -- in fact, that was the OSHA. When we  
24 cited that particular company in one of the abatements, that  
25 was what I suggested.

1 Q. Thank you, Doctor.

2 Let's turn now to this case and your opinions about  
3 whether Kmart cashiers can sit while working. Were you asked  
4 to give an opinion in this case?

5 A. Yes, sir.

6 Q. And what was the opinion that you were asked to give?

7 A. I was asked to -- the exact words I've got in my report,  
8 but basically I was asked whether they could do it standing or  
9 whether they could do it in a seated position, the CSAs at  
10 Kmart in the present -- in the present work situation.

11 Q. Were you also asked to review and react to the opinions  
12 that Dr. Johnson gave in this case?

13 A. I was asked in a -- in a second rebuttal I was -- in my  
14 second report, which was the rebuttal report, that's what I was  
15 asked to do.

16 MR. WOHL: And just so we have it before the witness,  
17 your Honor, in case he needs it, I'm going to ask to show the  
18 witness Exhibit No. 214, which is his September 21st report.

19 (Document was tendered to the witness.)

20 BY MR. WOHL:

21 Q. And if you could just identify for the Court, that is your  
22 supplemental report of September 21st?

23 A. This is my second report, yes, sir.

24 Q. Okay. Starting, then, with your initial opinion. What is  
25 your opinion about whether from an ergonomics perspective Kmart

1 front end cashiers could safely effectively and efficiently  
2 perform their duties at the front end register in a seated  
3 position?

4 **A.** What are my opinions?

5 **Q.** What is your opinion about that issue?

6 **A.** In the present setup, it is not possible for them -- it  
7 would -- not possible for them to do it in a seated  
8 environment.

9 **Q.** And we're going to talk more about why you feel that way,  
10 but first let's talk a little about process.

11 What was the process that you followed in reaching your  
12 opinion?

13 **A.** I collected data at the Tulare store.

14 **Q.** And what type of data did you collect?

15 **A.** Video data and data on the measurements of the work  
16 station.

17 **Q.** Anything else?

18 **A.** And some anthropometric data.

19 **Q.** Did you see a job description?

20 **A.** I saw a job description.

21 **Q.** Did you talk to anybody at Kmart about the job?

22 **A.** I spoke to somebody in human resources. I don't quite  
23 remember the name of the person.

24 **Q.** All right. Now, what would be about providing a cashier a  
25 seat that you felt would not be workable or appropriate from an

1 ergonomic point of view?

2 **A.** One would be increasing the risk of upper extremities,  
3 MSDs. One would increase the risk of upper extremity MSDs.  
4 One would increase the risk of back problems because of the  
5 twisting and as it relates to -- and there would be extended  
6 reaches.

7 **Q.** Do you believe that if a Kmart cashier performed the job  
8 while seated, that the cashier would be at higher risk of  
9 developing MSD?

10 **A.** I strongly believe that, yes.

11 **Q.** And what conclusions form that opinion?

12 **A.** The posture that they would have to conform to would  
13 increase the -- the upper extremity posture would increase --  
14 the angles would increase, the abduction and so on. They would  
15 not be able to reach out.

16 They would -- the same bend, if the bending -- if you're  
17 standing up and if you bend down and if you're sitting down and  
18 bending, the risk involved is different from standing to  
19 sitting.

20 **THE COURT:** May I ask you to be clear on something?

21 You're describing now the risks if the cashier was seated,  
22 correct?

23 **THE WITNESS:** Yes, sir.

24 **THE COURT:** And by that do you mean the 90-degree  
25 thing or do you mean a sit -- what you call a butt rest?

1           **THE WITNESS:** Sir, I'm talking about the 90 degrees.

2           **THE COURT:** All right. And are you assuming that the  
3 legs would be -- knees would be under the table or not under  
4 the table?

5           **THE WITNESS:** That -- if it is under the table, the  
6 angles would be about the same. If they are not under the  
7 table, they would be further away, way further away.

8           **MR. DOSTART:** Your Honor, I have never --

9           **THE COURT:** What?

10          **MR. DOSTART:** I just want to be clear. His report  
11 only deals with the current configuration. And so to the  
12 extent that he begins to offer an opinion about any  
13 modifications, we would object that his opinions would be  
14 outside --

15          **THE COURT:** Well, that's what I'm -- yes.

16          **MR. WOHL:** Your Honor, that's actually not correct  
17 though. His first opinion opines on the current configuration.

18          In the second opinion, the rebuttal opinion -- he opines  
19 on Dr. Johnson's proposed modifications which include, as the  
20 Court knows, clearing away the knee areas so that the knees can  
21 go in.

22          So, in fact, he can opine about --

23          **THE COURT:** Why is the second report timely?

24          **MR. WOHL:** It was timely submitted, your Honor. We  
25 already went through that, September 21st. Rebuttal report.

1           **THE COURT:** What?

2           **MR. WOHL:** It's timely, your Honor. Their rebuttal  
3 report was untimely. Ours was timely, September 21st.

4           **MR. MATTHEW RIGHETTI:** Dr. Johnson -- you recall Dr.  
5 Johnson was going to testify from his supplemental report and  
6 Mr. Wohl eloquently objected and he could not testify to it.  
7 Except you said if Dr. Johnson wants to come back on rebuttal,  
8 he could testify to it.

9           **MR. WOHL:** No, your Honor. It's two different  
10 issues --

11           **MR. MATTHEW RIGHETTI:** Well, excuse me.

12           **MR. WOHL:** Excuse me.

13           **MR. MATTHEW RIGHETTI:** The same rule should apply  
14 here.

15           If Dr. Johnson comes back to testify about his  
16 supplemental report, I suppose Dr. Fernandez can come back  
17 and --

18           **MR. WOHL:** That's not correct. I'm sorry. Dr.  
19 Fernandez's September 21st supplemental report responded to Dr.  
20 Johnson's opening report, not rebuttal report. This was  
21 appropriate rebuttal to Dr. Johnson's appropriate report and it  
22 was submitted timely on September 21st.

23           **THE COURT:** What was the date that any report was due?

24           **MR. WOHL:** The initial due date, I believe, was  
25 September 7 and we submitted ours on time on September 6. I

1 think Dr. Johnson did submit the opening report on time,  
2 September 7. Then the deadline for the rebuttal or  
3 supplemental reports was, I believe, September 21st. We  
4 submitted ours on time, September 21st. They did not submit  
5 theirs on time.

6 So Dr. Fernandez's testimony about Dr. Johnson's  
7 modifications address his first report. And his supplemental  
8 report is timely, so there is no issue here, your Honor.

9 **THE COURT:** Just a minute.

10 Who has the burden of proof on this issue?

11 **MR. WOHL:** Plaintiff does, of course.

12 **THE COURT:** Agreed.

13 **MR. MATTHEW RIGHETTI:** What issue are we talking  
14 about?

15 **THE COURT:** Well --

16 **MR. WOHL:** Any issue --

17 **THE COURT:** The issue of whatever it is these experts  
18 are discussing.

19 I think the plaintiff has the burden of proof in general.  
20 So the way this normally works, according to my case management  
21 order, is the party with the burden of proof goes first. And  
22 then the other side, which in this case would be the defendant,  
23 submits an opposition report. And then there's supposed to be  
24 a -- can be, doesn't have to be, a reply report. That's the  
25 way I lay them out: The opening, the opposition and then the



1 reply. And the reply report is the one that has to be done on  
2 rebuttal.

3 So what's confusing me here is the -- here the defendant  
4 has two reports: An opening report, which he didn't even have  
5 to give anyway. That could have been your opposition report.  
6 That's what I'm thinking.

7 So to my mind both -- the opening report, which was kind  
8 of a gift, it didn't have to be made, the defendant, because  
9 you didn't have the burden of proof, and everything could have  
10 been said in your opposition report. That's the way I see  
11 this.

12 On the other hand, since the plaintiff has the burden of  
13 proof, the response to all of that other stuff should come in  
14 rebuttal by Dr. Johnson.

15 So I'm going to let the defendant refer to both these  
16 reports since, in my view, they both could have been submitted  
17 later in September and not on the opening day since the  
18 defendant does not have the burden of proof.

19 So this is not an inconsistency. It's a -- it's all laid  
20 out right there in the case management order.

21 All right. So that having been said, you still have to  
22 stick to what's in the report. Now we got off onto this  
23 because I asked a question.

24 My question was whether or not the witness was assuming  
25 the legs of the cashier would be under the bench or out in

1 the -- kind of floating around, hovering over the fatigue mat?  
2 What's your answer, please?

3 This was on the opinion you were giving a moment ago. I  
4 need to understand what your assumptions are. What are your  
5 assumptions?

6 **THE WITNESS:** My assumption in this particular -- when  
7 I made the statement was, there would be knee clearance, and  
8 the employee would be able to get under the work surface.

9 **THE COURT:** All right. Now, as I understand the  
10 desks, there's a problem. There may not be clearance because  
11 the scanner sticks down six inches, four and a half inches.

12 **THE WITNESS:** There's not enough knee clearance.  
13 What's going to happen is, they are going to be scooting away.  
14 And what's going to happen, for them to reach out for a  
15 particular item they would have to be -- they would have to  
16 bend more.

17 If they could -- if there was knee clearance, the angle  
18 would be -- would not be that extensive. If there is -- if  
19 it's blocked off as -- as it might be, what's going to happen  
20 is the angles are not going to be very different, but the risk  
21 is going to be different. That's what I'm getting at.

22 **THE COURT:** I think I understand the point. Continue,  
23 please.

24 **BY MR. WOHL:**

25 **Q.** I was going to address this later, but I might as well

1 address it now.

2 Do people have different what might be called girth or  
3 thigh thicknesses as part of their anatomy?

4 **A.** I think thigh thickness is a factor, and one has to  
5 consider thigh thickness when it comes to getting under the  
6 work surface.

7 So if you're sitting on a chair, your thigh thickness plus  
8 one or two inches -- that's what you do is, the chair height  
9 plus your thigh thickness plus one, hopefully two inches should  
10 be -- and then that should be the height of the underside of  
11 your work surface.

12 **Q.** So what happens if you have a thicker thigh in terms of  
13 where you sit at the counter?

14 **A.** Basically, you've either got to drop down the seat -- and  
15 if you drop down the seat, then you the upper extremities are  
16 working in this awkward posture. If you drop down the seat.  
17 Or you're sitting down in a real awkward position, as this, and  
18 you're moving back because you can't get under the work  
19 surface.

20 **Q.** Okay. Let's go back to, Judge Alsup asked you about the  
21 two differences, so let's make sure we distill them, if you  
22 will, so we're very clear what we're talking about.

23 So, first off, if there were no reconfiguration of the  
24 checkstand, if we just left it as it is, is it correct that  
25 your view is that the cashier could not sit and ergonomically,

1 in a sound way, perform the job duties?

2 **A.** Yes.

3 **Q.** And so what are the conclusions that led you to that  
4 opinion?

5 **A.** There was no knee clearance. There's -- they're lifting  
6 ten pounds occasionally. And over a period of time they are  
7 lifting weights. There's movement involved. And they're  
8 working above six inches.

9 **Q.** And does bending have anything to do with your opinion?  
10 Whether they bend or not, is that part of your opinion?

11 **A.** The bending would go hand in hand with the six inches.  
12 So, basically, if it's -- the amount they bend is going to  
13 increase, yes.

14 **Q.** Now, following up on Judge Alsup's question, what if the  
15 obstruction under the counter was removed and, therefore, the  
16 cashier could sit with his or her knees under the counter,  
17 would there still be any of the concerns that you've expressed  
18 about working in a seated position?

19 **A.** You're asking me about only one of Dr. Johnson's -- just  
20 remove --

21 **Q.** Right.

22 **A.** -- the shelves?

23 **Q.** Right.

24 **A.** If you remove the shelves, as your Honor pointed out, the  
25 electronics would -- would be an obstruction. Even if you did

1 not take that into consideration, you found a way around it,  
2 and they came in close, the risk is still there for the upper  
3 extremities. There's still foot movements or movement around.  
4 You have to get on/off and move the seat. And so it would pose  
5 problems.

6 **Q.** All right. We can come to that in little more detail  
7 later.

8 So with regard to the data that you collected --

9 **MR. WOHL:** Are we good on time, by the way, your  
10 Honor? Should we keep going?

11 **THE COURT:** Let's go until 9:15.

12 **MR. WOHL:** Thank you, Your Honor.

13 **BY MR. WOHL:**

14 **Q.** What specific data did you obtain to form your opinions in  
15 this case?

16 **A.** I collected video data on six cameras. And the six  
17 cameras were, basically, two cameras on -- we've collected data  
18 on three aisles. So two cameras on each aisle, aisle 1, aisle  
19 4, and aisle 7, of the Tulare store.

20 **Q.** So how did you end up selecting those particular cash  
21 registers or counters? 1, 4, and 7, is that what you said?

22 **A.** 1, 4, and 7.

23 **Q.** As opposed to any others?

24 **A.** The manager told us those are the most commonly used  
25 aisles, checkout aisles. So that's the ones we picked up.

1 Q. How many cameras did you install per register?

2 A. Two cameras per register. One directly over the register  
3 itself, and one behind so we could get a side view, so we could  
4 get some -- the postures, especially of the back and the arm.  
5 Because when you get directly over, you're sometimes not able  
6 to see that clearly.

7 Q. And what period of time was video recording done?

8 A. For a whole week, from August 7 through August 13, from  
9 8:00 a.m. in the morning continuously to 10:00 p.m. at night.

10 Q. As a result of that recording, how many total hours of  
11 video did you obtain?

12 And just so we're clear, two cameras looking,  
13 nevertheless, at the same events. So just looking at the  
14 events and not the fact you have double cameras running, how  
15 much total time was recorded?

16 A. We had -- if you're talking about the whole hours, we had  
17 294 hours. That's 14 times 3 times 7. That's 294.

18 Q. Okay.

19 A. Of course, multiplied by two cameras.

20 However, we also collected data because we are not quite  
21 sure when somebody -- we were not quite sure a minute before,  
22 if a customer came in, whether the employee would be work --  
23 CSA would be working. So we collected data 15 minutes before  
24 the start of shift, and 15 minutes at the end of shift.

25 So 7:45 to 8:00 o'clock, and 10:15 to 10 -- 10:00 o'clock

1 to 10:15, data were also collected, and is on the hard drive  
2 that you'll have.

3 Q. Just so we're clear, by "7:45" do you mean in the morning?

4 A. 7:45 a.m., yes, sir.

5 Q. And by 10:15, do you mean in the evening?

6 A. Yes, sir.

7 Q. So, basically, 12 hours plus a little bit of time at each  
8 end is what you were recording; is that correct?

9 A. Fourteen hours plus 15 minutes.

10 Q. Fourteen hours. My math is remiss. Thank you. Fourteen  
11 hours.

12 Okay. So if I heard you correctly, you accumulated  
13 approximately 300 hours worth of video, correct?

14 A. Yes, sir.

15 Q. Did you review all 300 hours?

16 A. No. We randomly selected 30 hours of video.

17 Q. And how did you go about randomly selecting those 30  
18 hours?

19 A. We basically came up with a random number generator, and  
20 started randomly selecting videos.

21 We selected 50, I think, videos, one-hour video clips.  
22 One for camera A, what we call camera A, the one on top, and  
23 camera B, the side view.

24 And we went down the list. We analyzed that one-hour clip  
25 only if there was any transactions occurring. If there were no

1 transactions occurring, we went to the next randomly-identified  
2 clip and we analyzed it.

3 In the end, we -- we had to look at 37 clips to pick up  
4 the -- the 30 we needed. There is one --

5 **MR. DOSTART:** I just want to object, real quickly.  
6 His report states that if the one-hour segment selected did not  
7 contain any transactions, that they did not choose a new random  
8 hour; they, instead, chose the very next hour.

9 **THE WITNESS:** Yes.

10 **MR. WOHL:** That's not an objection. He can do that on  
11 cross. He shouldn't be interrupting my argument with that kind  
12 of comment.

13 **THE COURT:** That's true. Save it for cross.

14 Did you say 50 or 30?

15 **THE WITNESS:** We identified 50 of them, and then we  
16 just went down the list. And we wanted to select 30. We ended  
17 up picking 37, as per appendix A of my report.

18 We just went down the list and so, first one, for example,  
19 the first random hour we picked up there was no transaction, so  
20 we moved to the second one, moved to the third, and so on and  
21 so forth.

22 So all of the 30 that was selected in the end were from  
23 that list of 50.

24 **BY MR. WOHL:**

25 **Q.** And then what were you looking for when you looked at the



1 videotape that you selected?

2 **A.** There was some variables that we were -- we had identified  
3 that we were going to be looking at. And that is on that --  
4 that is on page, I think, 6 of my report, the transactions, the  
5 number of foot movements, the -- whether your arms are above  
6 elbow height, arms are at shoulder height, and so on. There  
7 are about 10 or 12 variables that we looked at.

8 **Q.** Let's break this down a bit, Doctor.

9 I'm going to show you what's already been marked and used  
10 in this trial as Exhibit 216, which is a diagram of the  
11 checkstand at Tulare. It's on a poster board here, so I'm  
12 hoping you will be able to see it at this angle. If not, if  
13 it's all right with the Court, step down and show us.

14 Do you recognize that as a diagram of the checkstand  
15 configuration at Tulare?

16 **A.** Yes, sir.

17 **Q.** Matter of fact, is that a diagram that you prepared as  
18 part of your report?

19 **A.** Not for the report.

20 **Q.** Separately, for part of the rebuttal report, perhaps?  
21 Separately?

22 It's okay. But you did prepare this diagram, correct?

23 **A.** Excuse me?

24 **Q.** You prepared this diagram, correct?

25 **A.** Yes.

1 Q. Okay. And do you believe it's a proportionately true and  
2 accurate representation of the checkstand configuration at  
3 Tulare?

4 A. Yes.

5 Q. And can you just -- I think the Court is familiar with it,  
6 but you can take us through where everything is located so we  
7 are on exactly the same page where we are referring to. So  
8 this will be relevant, will you tell what the video showed?

9 MR. WOHL: May he step down --

10 THE COURT: Yes, go ahead.

11 BY MR. WOHL:

12 Q. You can be brief. Judge Alsup has heard this before, but  
13 I think going through it quickly --

14 THE COURT: I think I know where everything is. Go  
15 ahead.

16 MR. WOHL: I do have additional questions, your Honor.  
17 I'll be asking about those too.

18 BY MR. WOHL:

19 Q. But, go ahead, Dr. Fernandez, tell us what this shows in  
20 terms of the configuration.

21 A. This shows the bagging table out here. We have out here,  
22 which is the -- sorry. The register. This is the register  
23 here. Out here, this is the printer, the coupon printer. This  
24 is the screen. (Witness indicating on diagram.)

25 Out here --

1 Q. May I ask, is there a keyboard here?

2 A. The keyboard is right in front here (indicating). That's  
3 the anti-fatigue mat. Out here is the demagnetizer. This is  
4 the bi-optical scanner. This is the credit card machine and  
5 also where you do the surveys. This is a bagging table out  
6 here.

7 Q. Okay. Let's get some dimensions out, as well, while  
8 you're standing up, Doctor.

9 First off, can you tell the Court -- first of, did you  
10 take dimensions of the configuration?

11 A. I did.

12 Q. Can you tell the Court what the distance is from on what  
13 I'll call the sales counter, from the point where the counter  
14 holding the register hits, to the end of the counter, to the  
15 right?

16 A. Thirty-five inches.

17 Q. And did you measure the height of the counter?

18 A. The height of the counter is 36 inches.

19 Q. Okay. And did you measure what I would call depth of the  
20 counter, which is the distance from the edge of the counter  
21 towards the cashier, to the edge of the counter towards the  
22 customer?

23 A. It's 23, but I need to confirm that. Give me second,  
24 please, sir.

25 Q. Please, do.

1 A. It's 23 inches.

2 Q. All right. And then what is the distance -- first off, I  
3 don't know if your diagram shows it, but what's -- on a bird's  
4 eye view above the mat or otherwise behind the mat where the  
5 cashier stands?

6 A. This has divider out here, and the other side is the next  
7 aisle (indicating).

8 Q. Did you measure the distance from that panel to the edge  
9 of the counter where the cashier would be standing?

10 A. This distance out here from the panel right up to the  
11 cashier in front of this scanner front edge is 27 inches.

12 Q. Now, I believe in your report you used a term called "the  
13 box"?

14 A. Yes, sir.

15 Q. Can you tell the Court what you meant by "the box."

16 A. What I meant by the box is this area out here, 35 by 27  
17 (indicating).

18 Q. And just so we're clear, 35, you actually mean going out  
19 this far, correct (indicating)?

20 A. Yes, sir.

21 Q. So that's the box there, correct?

22 A. Yes.

23 Q. Then did you measure the distance between the edge of the  
24 counter and the bagging table?

25 A. Twenty-one inches (indicating).

1 Q. And then the bagging table itself, what are the  
2 dimensions, I guess, looking at that way, perhaps, depth,  
3 length and height?

4 A. The -- this out here is 47.75. The depth is 28.25.

5 Q. Just so we're clear 28.25, meaning from left to right on  
6 the diagram?

7 A. Yes.

8 Q. And the height?

9 A. And the height of that is 31.75.

10 Q. All right. I think those are all the relevant dimensions.

11 THE COURT: I have --

12 MR. WOHL: Yes, Your Honor.

13 THE COURT: -- a question.

14 Maybe it's not to scale, but do you see the thing you call  
15 the -- what did you call that dark area?

16 THE WITNESS: Anti-fatigue mat?

17 THE COURT: Well, mat. Okay. But you said it was 27  
18 by 35.

19 THE WITNESS: This area here, sir (indicating).

20 MR. WOHL: Beyond the mat, your Honor, all the way.

21 THE WITNESS: This whole area (indicating).

22 THE COURT: All right. I can't see anything that  
23 looks -- you mean all the way out to the corner is 35?

24 THE WITNESS: Yes, sir.

25 THE COURT: All right.

1           **MR. WOHL:** That's what the witness is referring to as  
2 the box, Your Honor.

3           **THE COURT:** Here's what I want you to do during the  
4 break. I want you lawyers to watch what the witness does, but  
5 have the witness ink in those numbers so that there will be  
6 real dimensions there.

7           And you all make sure that the numbers that get on there  
8 are the ones that were testified to. Do it the way a draftsman  
9 would do it, with little arrows and so forth. All right.

10           **MR. WOHL:** Yes.

11           **THE COURT:** So we'll have those clearly available to  
12 the Court.

13           **MR. WOHL:** All right.

14           **THE COURT:** There's one I'm interested in. What is  
15 the distance from the -- all the way out to the far left-hand  
16 side of the counter?

17           **THE WITNESS:** (Indicating.)

18           **THE COURT:** Yes. From there to there.

19           **THE WITNESS:** It's about 22, sir.

20           **THE COURT:** What?

21           **THE WITNESS:** It's about 22. I don't know the exact  
22 measurement. I've got this measurement up to the coupon  
23 printer. I don't have this --

24           **THE COURT:** What is the coupon thing?

25           **THE WITNESS:** Twenty-two. So that's why I say --

1           **THE COURT:** Twenty-two. All right.

2           **THE WITNESS:** So it's about 22.

3           **THE COURT:** All right. And then using the Pythagoras'  
4 Theorem, can you, in your head, tell us what the reach would be  
5 to that bottom left corner?

6           **THE WITNESS:** This corner here (indicating)?

7           **THE COURT:** Down there.

8           **THE WITNESS:** I could if you give me some -- after the  
9 break, I could come back, sir.

10          **THE COURT:** But you didn't measure that?

11          **THE WITNESS:** No, I did not measure this, no.

12          **THE COURT:** All right.

13          **THE WITNESS:** But, as you said, it could be  
14 determined, yes, sir.

15          **MR. WOHL:** Geometry should help us, your Honor.  
16 You're right.

17          **THE COURT:** Mr. Righetti, do you know what Pythagoras  
18 was?

19          **MR. MATTHEW RIGHETTI:** I know who he was. He had  
20 something to do with geometry, right?

21          **MR. WOHL:** Clever fellow, your Honor.

22          **THE COURT:** Angles, yes, correct. You get an A.

23          All right. We've got some more time to go. I don't want  
24 to take the break yet. Continue on.

25

1 BY MR. WOHL:

2 Q. Now that we have that in front of you and you have given  
3 us some dimensions, could you tick off for the Court the  
4 various activities or motions or movements that you were  
5 observing and recording in your analysis of the video. Just go  
6 through each of the things that you were looking at.

7 A. I measured the duration of each of the transactions that  
8 occurred in that one hour.

9 THE COURT: Which one hour? I thought you looked at  
10 37.

11 THE WITNESS: I looked at 37. Out of the 37, only 30  
12 of them had transactions in it. So I evaluated only those 30.  
13 Disregarded the seven.

14 THE COURT: You mean there was only one hour's worth  
15 of transactions during that whole time? Is that what you're  
16 saying?

17 THE WITNESS: Sir, out of the 37 one-hour  
18 transactions, seven of the one-hour transactions had no  
19 transactions in them at all, so those were disregarded. And we  
20 picked up -- we went ahead and picked up, then, 30 of -- 30  
21 one-hour, the rest of them. Of the 30, we ended up with 537  
22 transactions.

23 THE COURT: I see. All right. Total?

24 THE WITNESS: Total 537 transactions.

25 THE COURT: All right. So does that mean 537



1 individual items that were rung up, or do you mean 537  
2 customers?

3 **THE WITNESS:** Customers.

4 **THE COURT:** All right. Thank you.

5 **THE WITNESS:** So we had 537 customers/transactions.  
6 We got the duration of each of those transactions, the number  
7 of foot movements. And I've gone and displayed it both ways.  
8 I've displayed it in terms of the number -- normalized, how  
9 many times it occurred in one hour. And I normalized it per  
10 transaction.

11 **BY MR. WOHL:**

12 **Q.** And just define for the Court by a "foot movement," what  
13 do you mean?

14 **A.** If the person is standing and moving. Clear definition  
15 for each of these on page 23 of my report, if your foot is  
16 moving in any direction we counted it. And we counted the  
17 number of times your feet move during -- during the whole  
18 transaction.

19 **Q.** Thank you. What else did you look at?

20 **A.** We looked at the number of extended reaches.

21 **Q.** Say, again. What type of reaches?

22 **A.** Extended reaches.

23 **Q.** Extended reaches?

24 **A.** Neck twists.

25 **Q.** Actually, let's break this down. I want to be as clear

1 for the judge as possible. When you say "extended reach," what  
2 do you mean?

3 **A.** An extended reach is when the arms are fully extended, or  
4 the arm is partially extended and the back is flexed. The back  
5 is bent or flexed.

6 **Q.** Thank you.

7 What next?

8 **A.** The next one was overhead reach. And overhead reach is  
9 when the CSA is reaching with the arms fully extended, or  
10 there's partial extension of the arms above the shareholder.

11 **Q.** Okay. What else?

12 **A.** Back twist. When the CSA moves back around the sagittal  
13 plane -- sagittal plane is the middle plane out here -- greater  
14 than 30 degrees, that is a back twist.

15 **Q.** Anything else?

16 **A.** Back flexion. Back flexion is when the CSA is standing  
17 and the shoulder is bent forward. That's what I called  
18 flexion. And this forward bending of the upper back.

19 **Q.** Anything else?

20 **A.** Low back flexion, where they're bending down and they're  
21 going below where -- below the counter. That's what I call low  
22 back flexion, when they go in to the shelves.

23 Next one was number of the times hands at shoulder, hands  
24 at shoulder level or above shoulder level.

25 The next one was number of times elbow at shoulder level.

1       Next was the number of times the CSA was out of the box  
2 during the transaction. The one after that is the number of  
3 times, the number of instances the CSA was out of the box  
4 between transactions.

5       The next, the number of instances the items scanned.  
6 Number of instances of items bagged.

7       Next, number of heavy items present. And heavy was close  
8 to ten pounds.

9       Number of instances of heavy items pushed or pulled.

10       The next was --

11               **THE COURT:** What's the difference between that one and  
12 scanned?

13               **THE WITNESS:** All items are scanned, sir.

14               **THE COURT:** What?

15               **THE WITNESS:** All small items are scanned. Large  
16 items are scanned.

17       When I say pushed or pulled, I was referring only to heavy  
18 items being pushed or pulled.

19               **THE COURT:** I know, but the earlier one was scanned,  
20 heavy items scanned.

21               **THE WITNESS:** No, sir.

22               **MR. WOHL:** I think it was just items scanned. I may  
23 have misspoke. I'm sorry.

24               **THE COURT:** When you say "scanned," does that include  
25 the times that the hand scanner is used on an item still in the

1 basket?

2           **THE WITNESS:** Yes, sir.

3           **THE COURT:** Okay. Go ahead.

4           **THE WITNESS:** Number of instances of heavy items  
5 lifted, and the number of instances of heavy items rotated.

6 **BY MR. WOHL:**

7 **Q.** So those are the movements or actions that you observed?

8 **A.** Yes, sir.

9 **Q.** By the way, did you also observe what items were being  
10 purchased on the video?

11 **A.** When I documented it?

12 **Q.** Yes.

13 **A.** I have documented all 537, during each transaction what  
14 was occurring, when it was occurring, and what we perceived as  
15 was being lifted, yes, or moved.

16 **Q.** And that's in your report, as well?

17 **A.** If it was heavy, yes.

18 **Q.** All right. So in your report --

19           **MR. WOHL:** Again, your Honor, this is Exhibit 213.

20 **BY MR. WOHL:**

21 **Q.** -- do you report on the number of such movements or  
22 actions as you observed, as you have described it?

23 **A.** Yes, sir.

24 **Q.** And does that appear specifically on pages 12 and 13 of  
25 your report?

1 A. Twelve and 13, tables 3 and 4 of my report, sir.

2 Q. From an ergonomic perspective, is there anything  
3 significant about your findings of the number of times there  
4 were such motions or movements, as you've described them?

5 A. The foot movements were -- there were what we notice were  
6 the number of foot movements, the number of extended reaches,  
7 the back flexions, and the number of times the shoulder was  
8 the -- the elbow was at the hands -- sorry, the hands were at  
9 the shoulder or above the shoulder.

10 These were some numbers we looked at, and based on that we  
11 felt that this -- the foot movements meant that they were  
12 moving around pretty high.

13 Q. And what, if any, relevance do you think that has to the  
14 issue of whether they can sit or stand while working?

15 A. They would -- if they were seated, they would have to get  
16 off the seat and move around to get the job done.

17 Q. Is there any significance to the number of foot movements  
18 you observed with regard to whether it presents an undue risk  
19 for cashiers to stand while performing this job?

20 A. You'd have to repeat that, or rephrase.

21 Q. Yes. Do you understand that in this case Dr. Johnson  
22 expressed the view that it is ergonomically bad for the  
23 employees to have to stand while performing their job all the  
24 time?

25 A. Yes, that's what he says.

1 Q. Is there any significance, in considering that  
2 proposition, the fact that you observed them moving quite a bit  
3 behind the stand?

4 A. By them moving, basically, what happens is it helps in the  
5 venous blood pooling.

6 Q. And it does that because what?

7 A. Because the muscle pump kicks in. The muscle pump helps,  
8 and you're moving around, and you delay fatigue.

9 Q. Okay. Did you frequently find cashiers statically  
10 standing; that is, standing without any movement?

11 A. It depends on if the cashier is standing and if there's  
12 not movement. If there's no movement, it's different from if  
13 there is movement. In this particular case, there was  
14 movement.

15 Q. Also, you mentioned antifatigue mats. And that's the  
16 black square that's on the chart. What's the significance of  
17 an antifatigue mat with regard to the issue of standing?

18 A. It -- it delays the onset of fatigue.

19 Q. Okay.

20 THE COURT: It's time now for our break. But -- so  
21 we'll do that. But you know you've referred to these things in  
22 the expert report. Unless you lawyers have stipulated to the  
23 contrary, expert reports don't come into evidence. Have you  
24 stipulated to the contrary?

25 MR. WOHL: I believe so, your Honor, I believe that is

1 in evidence.

2 **THE COURT:** They're saying no.

3 **MR. DOSTART:** We have not stipulated to the admission  
4 of the expert reports into evidence, your Honor.

5 **THE COURT:** So you are referring to these tables and  
6 things, but that's not in evidence.

7 **MR. WOHL:** I will put them in evidence because I  
8 thought they were, your Honor.

9 **THE COURT:** Expert reports never come into evidence,  
10 Mr. Wohl, over objection because it's hearsay.

11 Now, sometimes a table -- it depends. I'm not saying this  
12 one would come in or not. But, occasionally, some tabulation  
13 of data could come in as a standalone document. But I would  
14 say it's exceptional.

15 So if there's anything in that table that you want to make  
16 sure is in the record, you need to verbalize it and put it on  
17 the verbal record, unless you lawyers can agree that it can  
18 come in otherwise.

19 So if, on the other hand, there is a stipulation that your  
20 expert reports can come in, I'm okay with that, if you  
21 stipulate. But that would be the rare exception.

22 **MR. WOHL:** We'll deal with it one way or the other,  
23 but I appreciate it, your Honor. I thought it was already in  
24 evidence, so I will take care of this.

25 **THE COURT:** Thank you.

1 Now, be sure you that you all confer and have the  
2 witness's numbers put on that slide 2B. All right. We'll take  
3 15 minutes at this time.

4 MR. WOHL: Thank you.

5 (Recess taken from 9:22 to 9:41 a.m.)

6  
7 THE COURT: All right. Ready to continue?

8 MR. WOHL: Yes, we are, your Honor.

9 THE COURT: All right. Please, continue.

10 MR. WOHL: First off, your Honor, I think we have put  
11 in the dimensions that you requested on Exhibit 216.

12 THE COURT: All right.

13 MR. WOHL: 216-A. And I'm going to put this back on  
14 the easel.

15 THE COURT: Thank you.

16 MR. WOHL: And, also, I guess this should be on here,  
17 too, Emily.

18 BY MR. WOHL:

19 Q. Dr. Fernandez, did you do as the Court requested, which  
20 is, using geometry, calculate what's the distance from the  
21 point where the edge of the register counter -- the sales  
22 counter diagonally across to the far corner of the sales  
23 counter table?

24 A. 31.82.

25 THE COURT: All right. Thank you.



1           **MR. DOSTART:** I just want to be clear for the record,  
2 your Honor, there are some distances that are not yet reflected  
3 on what is now 216-A, that we have asked to be reflected.

4           I don't think there's an objection, but we just want to  
5 make sure that the Court's aware that there are some additional  
6 distances.

7           **THE COURT:** I tell you what. If they don't get on by  
8 the time you do your cross, you can cross-examine the witness,  
9 and we'll put them on there on the fly.

10           **MR. DOSTART:** Okay. Thank you.

11           **THE COURT:** Thank you.

12           **MR. WOHL:** So we will add, you Honor, that diagonal  
13 distance that Dr. Fernandez just testified to so it's a  
14 complete chart.

15           **THE COURT:** Thank you.

16           **MR. WOHL:** Your Honor, I have been unable to reach an  
17 agreement with plaintiff's counsel about simply stipulating to  
18 have Dr. Fernandez's reports put in. So I would like to try it  
19 this way. You can tell me if I'm doing it wrong.

20           I would like to draw the witness's attention to page 12 of  
21 Exhibit 213.

22           **THE COURT:** Yes.

23 **BY MR. WOHL:**

24 **Q.** Ask, can you identify for the Court what that page is?

25 **A.** That's the summary of the -- the summary of the video

1 analysis of activities based per hour.

2 **Q.** And where do the data come from that's shown on this  
3 table?

4 **A.** The 30 one-hour video clips that were collected, that were  
5 part of the random sample of the close to 300 -- the 300 hours  
6 that we had collected.

7 **MR. WOHL:** Your Honor, I am being told plaintiff will  
8 stipulate to the admission of at least page 12, with Exhibit  
9 213, which is table 3.

10 **THE COURT:** What is the exhibit number going to be for  
11 that one page?

12 **MR. WOHL:** Well, it's part -- actually, it's 213-14, I  
13 think, is the right way of putting it, your Honor.

14 **THE COURT:** Two --

15 **MR. WOHL:** 213-14.

16 **THE COURT:** Where does the 14 come from?

17 **MR. WOHL:** Page 14 of the exhibit.

18 **THE COURT:** You said it was 12.

19 **MR. WOHL:** Page 12 of the report, but the exhibit  
20 numbering is, you pick up a couple of extra pages at the  
21 beginning, so it's page 14.

22 213-14 would be the proper way, I think, of identifying  
23 this exhibit.

24 **THE COURT:** And read into the record the title of the  
25 chart that's on that page.

1           **MR. WOHL:** Will do, your Honor. Table 3. Summary of  
2 Activities, paren, per hour, end paren.

3           **THE COURT:** That item is received in evidence. And  
4 I'm going to have to ask you to repeat it for my -- 213-14.

5           **MR. WOHL:** That's correct, Your Honor. And that's  
6 table 3.

7           **THE COURT:** Thank you. That's received.  
8 (Trial Exhibit 213-14 received in evidence.)

9           **MR. MATTHEW RIGHETTI:** That will have its own exhibit  
10 jacket.

11           **THE COURT:** Should. Should be a standalone document.

12           **MR. WOHL:** We will do that, your Honor.

13           **THE COURT:** All right.

14 **BY MR. WOHL:**

15 **Q.** Let me then draw your attention to page -- I'll stick with  
16 the exhibit number because I think that's easier. Exhibit  
17 213-15. Do you have that in front of you, Dr. Fernandez?

18 **A.** Yes.

19 **Q.** And can you identify for the Court, what is table 4, which  
20 appears on the top half of Exhibit 213-15?

21 **A.** This is the summary of the activities, again, from the 30  
22 hours of video analysis that was conducted. But this is  
23 normalized per transaction as opposed to the previous table  
24 which was normalized per hour.

25 **Q.** So does this table show the same data just, as you say,

1 organized based on transaction rather than hour?

2 **A.** Yes, sir.

3 **MR. WOHL:** Your Honor, I would ask the plaintiffs  
4 stipulate to that table going into evidence, as well.

5 **THE COURT:** 213-15. Any objection?

6 **MR. DOSTART:** To that table alone, your Honor, no  
7 objection. Obviously, to the paragraphs beneath it we would  
8 object. To that table alone, however, no objection.

9 **THE COURT:** The table alone is all you're offering,  
10 correct?

11 **MR. WOHL:** Yes, Your Honor, since I'm not allowed to  
12 put in the rest, so that's what I would do.

13 **THE COURT:** All right. So that table alone will be  
14 received in evidence. And the table number is what?

15 **MR. WOHL:** So that is Table 4, Summary of Activities,  
16 paren, per transaction.

17 **THE COURT:** Okay. All right. That's in. Next.

18 (Trial Exhibit 213-15 received in evidence.)

19 **BY MR. WOHL:**

20 **Q.** Let me draw your attention, Dr. Fernandez, to page 26 --  
21 excuse me. Stick with this. Exhibit 213-28. And that's a  
22 table called, "Dimensions of Cashier Register at Kmart Store in  
23 Tulare Configurations."

24 Do you see that?

25 **A.** Yes.

1 Q. And can you tell the Court what that table is?

2 A. These are the dimensions of the seven cash registers at  
3 the Tulare store.

4 Q. Okay. And was this done by you or your team in connection  
5 with this analysis?

6 A. Yes.

7 THE COURT: Was it done by you or was it done by  
8 somebody else?

9 THE WITNESS: By my team.

10 THE COURT: Not by you?

11 THE WITNESS: Not by me, sir.

12 THE COURT: So that's hearsay information that they  
13 passed on to you?

14 THE WITNESS: I -- I did verify some of the  
15 measurements. And the measurements on page 27, I have taken.

16 THE COURT: All right.

17 MR. WOHL: Okay. Your Honor, I would offer this table  
18 into evidence, as well.

19 THE COURT: Any objection?

20 MR. DOSTART: No objection, Your Honor. I would just  
21 like to note that it appears all of the registers are the same,  
22 save for row T, which appears to have a slightly different  
23 column 2 and 4, distance.

24 But I just like to note that it appears each register is  
25 the same besides that, so no objection.

1           **THE COURT:** The table number is what?

2           **MR. WOHL:** It actually doesn't have a table number,  
3 Your Honor. So it's part of Appendix D.

4           **THE COURT:** All right.

5           **MR. WOHL:** Actually, if you don't mind, your Honor,  
6 let's make it 213-27 and 28. And that's Appendix D.

7           **THE COURT:** You're confusing me. 213-27 and 28?

8           **MR. WOHL:** Tell you what, your Honor. Let's do 213-27  
9 through 30. That's the -- no, 27 through 29. Excuse me.

10          **THE COURT:** What is the Exhibit number?

11          **MR. WOHL:** Exhibit 213-27 through 213-29. So it's  
12 three pages. And that comprises Appendix D to Dr. Fernandez's  
13 report.

14          **THE COURT:** Any objection to those three pages?

15          **MR. DOSTART:** The only objection to those three pages,  
16 your Honor, is the photograph, which is the -- either the final  
17 or the -- yeah, the final page of the exhibit, which we would  
18 object to.

19          **MR. WOHL:** And I will lay the foundation for that,  
20 too, your Honor.

21          **THE COURT:** Is that page 29?

22          **MR. WOHL:** Yes. So it's simply a photograph of the  
23 checkstand. I can ask the witness if he can identify the  
24 photo.

25          **THE COURT:** Lay the foundation. Go ahead.

1           **MR. WOHL:** Thank you.

2           **BY MR. WOHL:**

3           **Q.** Dr. Fernandez, do you see the photograph that appears on  
4 page -- on Exhibit 213-29?

5           **A.** Yes, I do.

6           **Q.** Can you identify that photograph for the Court, please?

7           **A.** That is a register at the Tulare store.

8           **Q.** And under what circumstances was that taken?

9           **A.** Excuse me?

10          **Q.** Under what circumstances was that taken, the photograph  
11 taken?

12          **A.** When we -- when my team was there on the 8th of August.

13          **Q.** 8th or 6th? It has the time stamp --

14          **A.** 6th of August.

15               **MR. WOHL:** Your Honor, I move, then, that those three  
16 pages be admitted.

17               **MR. DOSTART:** No objection, Your Honor.

18               **THE COURT:** All right. It will be received as  
19 213-27/29.

20               This is the most unsavory marking system. I don't like  
21 this marking system. But there's no choice, given the way this  
22 is being served up. So it's 213-27/29 is, apparently, Appendix  
23 D.

24               (Trial Exhibit 213-27/29 received in evidence.)

25               **MR. WOHL:** I trust you'll find other parts of my case

1 tastier, your Honor, but I'll do my best.

2 **THE COURT:** We are done with doing this, right?

3 **MR. WOHL:** We have one more, your Honor -- sorry, I  
4 thought the whole report was in, which we wouldn't have to  
5 bother you with this.

6 **BY MR. WOHL:**

7 **Q.** I now direct your attention, Dr. Fernandez, to what is now  
8 entitled Appendix E of the exhibit. This begins at 213-30.

9 **A.** Yes, sir.

10 **Q.** And extends to 213-33.

11 **A.** Yes, sir.

12 **Q.** And can you identify for the Court what those documents  
13 are?

14 **A.** These are the measurements taken by my associates while  
15 they were at the Kmart store during the week of August the 6th  
16 through the 13th.

17 **Q.** When you say "measurements," do you mean something more  
18 specific?

19 **A.** These were weight measurements that were taken. And there  
20 are some dimensions. When I say measurements, on page 31,  
21 which is Exhibit 213-33. These are the dimensions of the box.

22 **Q.** And were these articles of merchandise that were observed  
23 in the 30 hours or so of video that were observed?

24 **A.** These were some of the merchandise. But these are what --  
25 what we saw around at the Kmart store, not necessarily what we



1 saw in the videos.

2 **Q.** All right. And are you using this as part of your opinion  
3 in this case?

4 **A.** We use some of these numbers for -- as we saw it on the  
5 video.

6 **MR. WOHL:** All right. Your Honor, I would move for  
7 the admission of Exhibit 213-30 through 213-33.

8 **MR. DOSTART:** We would object to that as hearsay, your  
9 Honor.

10 **THE COURT:** May I see the exhibit?

11 (Pause)

12 **THE COURT:** It is hearsay, but what's the issue?

13 **MR. DOSTART:** The issue is that we don't know who took  
14 these measurements. We believe it was not the witness. There  
15 seems to be, maybe, some problem identifying exactly what the  
16 items are. And it's hearsay.

17 **MR. WOHL:** If I can maybe lay a further foundation,  
18 your Honor, does that help?

19 **THE COURT:** How can he-- he didn't -- unless he did  
20 the weighing, he's relying on someone else. It has nothing to  
21 do with his expertise.

22 **MR. WOHL:** Well, your Honor, he directed his team to  
23 do this. They did it under circumstances that merit  
24 considerations being valid measurements. And he viewed them  
25 worthy enough to rely upon them in delivering his report.

1 And I must say, your Honor, I don't think there's a whole  
2 lot of controversy about how much these items weigh. Even if  
3 there's a dispute as whether it's exactly 40 pounds or 39  
4 pounds, I think we can all agree it's certainly within the  
5 range of the weight.

6 So, again, I think this is exalting some technical  
7 construction over the substance of what we're trying to  
8 establish here.

9 **MR. DOSTART:** I would respectfully disagree with  
10 Mr. Wohl, your Honor. Like your Honor said, it's not clear  
11 that he did these measurements.

12 And as to whether or not a person could differ about the  
13 weight of an item, for instance, a 16-person tent, I know for a  
14 fact that not all of them weigh 65 pounds.

15 So the idea that we're going to admit into evidence this  
16 chart that appears to be just put together with, you know, a  
17 bunch of items and some weights that they believe they weigh is  
18 hearsay. We would object.

19 **MR. WOHL:** And, of course, your Honor, he is entitled  
20 to rely on evidence even if it's hearsay.

21 **THE COURT:** He can rely on it. Doesn't mean it comes  
22 into evidence. So this one does not come into evidence. This  
23 one is out.

24 **MR. WOHL:** All right, your Honor.

25 **THE COURT:** He can testify to his opinions in

1 referring to this, but the document itself does not come in.

2 **MR. WOHL:** All right. Thank you, Your Honor.

3 **BY MR. WOHL:**

4 **Q.** Finally, Dr. Fernandez, look at what's been attached as  
5 Exhibit F to your report, which is Exhibit 213-34 through  
6 213-46.

7 Can you identify for the Court what those photographs are?

8 **A.** These are -- these are stills that were extracted from  
9 pages 33 -- well, should I refer to the exhibit or the page  
10 numbers?

11 **Q.** Refer to the exhibit numbers so we can try to keep this  
12 consistent.

13 **A.** Exhibits 213-35 right up to exhibits 213-43, stills from  
14 the video footage.

15 And exhibits on pages -- photographs on pages -- sorry.  
16 Exhibits 213-44, 213-45, and 213-46 are photographs taken.

17 **Q.** All right. And are these photographs of checkstands,  
18 other areas of the floor space, the break rooms at the Tulare  
19 store?

20 **A.** Yes.

21 **MR. WOHL:** Your Honor, I move that these be admitted  
22 into evidence.

23 **MR. DOSTART:** Your Honor, we would object to the  
24 explanations in the report, which are beneath every single  
25 photograph on these pages, that purport to explain what is

1 going on in the photograph.

2 We would not object to the photographs themselves. But  
3 because each photograph is accompanied with an explanation, we  
4 would object that that's hearsay.

5 **MR. WOHL:** Your Honor, I could have Dr. Fernandez go  
6 photograph by photograph and simply affirm what's in his  
7 report, if that's how the Court wishes --

8 **THE COURT:** That doesn't mean the argumentative  
9 descriptions come in.

10 **MR. WOHL:** They are not argumentative, your Honor.  
11 They are observational.

12 **MR. DOSTART:** We believe they are argumentative.

13 **MR. WOHL:** They are observational, your Honor.

14 **THE COURT:** As a tender, objection sustained.

15 **BY MR. WOHL:**

16 **Q.** All right. Dr. Fernandez, take a look at Exhibit 213 --

17 **MR. WOHL:** Your Honor, so I am clear, the photographs  
18 are admitted --

19 **THE COURT:** No. You offered them as a packet. You  
20 went all or nothing. You lose. You went all or nothing.

21 **MR. WOHL:** I will do it the other way then, your  
22 Honor. That's fine.

23 **BY MR. WOHL:**

24 **Q.** So Exhibit 213-35, can you describe for the Court what the  
25 photograph is in the top half of the page?

1 A. Photograph is the CSA is leaning forward. And there's an  
2 extended reach to pick up an item.

3 Q. Can you describe for the Court what the photograph on the  
4 bottom of Exhibit 213-35 is.

5 A. That's the CSA is -- there's an extended reach, and she is  
6 scanning an item in the cart.

7 Q. Can you tell the Court what the photograph on top of  
8 Exhibit 213-36 is.

9 A. Flexion of the CSA. Denotes flexion of the back. And  
10 there's an extended reach while the CSA is scanning an item  
11 using a handheld scanner.

12 Q. Can you tell the Court what the photograph on the bottom  
13 half of Exhibit 213-36 is?

14 A. There is extended reach. There's a twist of the back  
15 while the CSA is retrieving the receipt from the receipt  
16 printer.

17 Q. Can you tell the Court what the photograph on Exhibit  
18 213-37 is.

19 A. The CSA is assisting a customer with the credit card  
20 machine. And while doing that, her back is slightly twisted.  
21 And there's extended -- there's an extended reach.

22 Q. Can you tell the Court what the photograph in Exhibit  
23 213-38 is.

24 A. The CSA is lifting an item that -- is lifting an item.

25 Q. Can you say anything else about that? If you can't, you

1 can't. Don't go beyond what you know. No? Okay.

2 Can you identify what -- the photograph on top of page --  
3 Exhibit 213-39 is?

4 **A.** The CSA is bagging multiple items. And what she's done is  
5 put a number of items in this large bag. And I've seen this  
6 video before, and this is -- this would weigh more than ten  
7 pounds.

8 **Q.** Can you identify the photograph at the bottom page of  
9 Exhibit 213-39?

10 **A.** The CSA is -- is ex- -- there's an extended reach.  
11 There's a slight twist of the back. There's flexion of the  
12 back while she's lifting a 12-pound -- sorry, 12-pack of soda.  
13 Which, a 12-pack weighs about 10 to 11 pounds.

14 **Q.** Can you identify for the Court what Exhibit 213-40 shows.

15 **A.** This is -- this is a photograph of -- of a cash register,  
16 showing the underside of the register. The register and the  
17 demagnetizer. Shelving in some areas, and bends in other areas  
18 under the counter.

19 **Q.** Can you tell the Court what the photograph at the top of  
20 Exhibit 213-41 shows?

21 **A.** CSA is flexing her back while she's retrieving items.

22 **Q.** Can you tell the Court what the photograph on the bottom  
23 of Exhibit 213-41 shows?

24 **A.** This particular photograph shows the CSA is retrieving  
25 bags from under the -- the bagging counter, and this is what we

1 call a low back flexion.

2 Q. Can you tell the Court what the photograph on the top of  
3 page 213-42 shows.

4 A. Twisting of the CSA. There's some twisting of the --  
5 twisting of the back, and there's abduction that is movement in  
6 the one side. And there's awkward posture of the shoulder  
7 while placing a case of beverage on the bagging table.

8 Q. Can you tell the Court what the photograph shows on the  
9 bottom of Exhibit 213-42?

10 A. This is an example of low back twist, also. This is some  
11 abduction of the hips while retrieving bags from under the  
12 counter.

13 Q. Can you tell the Court what exhibit 213 -- photograph on  
14 Exhibit 213-43 shows?

15 A. The CSA is reading something off the monitor screen, and  
16 she is twisting her neck to view it while she's bagging some  
17 items.

18 Q. All right. Can you tell the Court what the photographs in  
19 Exhibit 213-44 show.

20 A. Shows the CSA moving from one point to another in -- while  
21 she is performing a task, a bagging task.

22 Q. Can you tell the Court what the photographs in Exhibit  
23 213-45 show.

24 A. These are two photographs of the break room in Tulare.

25 Q. And, finally, can you tell the Court what the photograph

1 in Exhibit 213-46 shows.

2 **A.** This is -- this is the break room, another photograph of  
3 the break room in Tulare.

4 **MR. WOHL:** With that, your Honor, I would ask that  
5 these pages of exhibits, specifically 213-34 through 213-46,  
6 with the written descriptions that have been supported by the  
7 witness, with the exception -- to show that I'm consistent  
8 here, with the exception of the written description on 213-38  
9 be admitted into evidence.

10 **MR. DOSTART:** We would object, your Honor, to two  
11 things.

12 Number one, the lack of foundation for each photograph;  
13 and, number two, the fact that they're hearsay. There is no  
14 evidence the witness took these himself, that he knew who took  
15 them, or that they are accurate representations --

16 **THE COURT:** Which ones of these came from the video  
17 that he did otherwise take?

18 **MR. WOHL:** The witness should confirm it, but anything  
19 with the date stamp, your Honor. So anything that has the date  
20 stamp up in the upper right-hand corner would come from the  
21 videos.

22 **THE COURT:** None of this have I seen. I have no copy  
23 of this.

24 **MR. WOHL:** Do we have a copy for the Court?

25 I also have a color copy I could give your Honor, if you



1 would like that.

2 **THE COURT:** No.

3 What is the answer to the question that I asked?

4 **THE WITNESS:** The ones that have the numbers on top,  
5 yeah.

6 **THE COURT:** Those are the ones that --

7 **THE WITNESS:** From the video.

8 **THE COURT:** Is that all of them?

9 **THE WITNESS:** No. There are some that are  
10 photographs.

11 **MR. WOHL:** Your Honor, of course, photographs, there  
12 isn't a hearsay issue of photograph. Either the witness  
13 identifies them as depicting something or not. And he did. So  
14 there's no hearsay objection here, your Honor.

15 **THE COURT:** Have you been in the break room yourself?

16 **THE WITNESS:** Yes.

17 **THE COURT:** Is that a fair and accurate -- Do these  
18 pictures that you've described of the break room, are they fair  
19 and accurate representations of what the break room looked  
20 like?

21 **THE WITNESS:** Yes.

22 **THE COURT:** And you know that from personal knowledge?

23 **THE WITNESS:** Yes, sir, when I went there. I went to  
24 the break room, and this is what it looked like.

25 **THE COURT:** All right. All of these will be admitted

1 in evidence, with the exception that the written descriptions  
2 will not be admitted in evidence.

3 **MR. DOSTART:** Thank you, Your Honor.

4 **MR. WOHL:** Thank you, Your Honor.

5 (Trial Exhibit 213-34 through 213-46 received in  
6 evidence.)

7 **BY MR. WOHL:**

8 **Q.** We got back to what we're trying to do to wrap up before  
9 we get into the videos.

10 How often did you observe the cashiers handling what you  
11 describe as a heavy transaction?

12 **A.** So are you asking me in terms of per hour or per activity?

13 **Q.** Why don't you define it either way you want, either per  
14 hour or per transaction. How often did you see her handling a  
15 heavy transaction?

16 **MR. DOSTART:** Objection. Vague to the definition of  
17 heavy.

18 **MR. WOHL:** I thought the witness already defined it.

19 **BY MR. WOHL:**

20 **Q.** But, go ahead, define "heavy."

21 **THE COURT:** You said more than ten pounds, right?

22 **THE WITNESS:** Yes, sir.

23 **THE COURT:** So with that definition, how often?

24 **THE WITNESS:** Per hour, it occurs -- lifted about six  
25 times per hour.

1 BY MR. WOHL:

2 Q. And if -- was it handled any other way, besides lifted?

3 A. It's handled by if it's pushed or pulled, or if it's  
4 rotated. And if that is the case, then the number increases to  
5 8.47 times per hour.

6 Q. 8.7 times per hour?

7 A. 8.47.

8 THE COURT: 8.47, that's only pushing and pulling? Or  
9 it's pushing, pulling or lifting?

10 THE WITNESS: It's pushing, pulling, lifting and  
11 rotating.

12 THE COURT: 8.47 --

13 THE WITNESS: Yes.

14 THE COURT: -- per hour?

15 THE WITNESS: Yes, sir.

16 THE COURT: Okay.

17 BY MR. WOHL:

18 Q. And lifting was 6 times an hour?

19 A. Lifting is 6.07 times per hour.

20 Q. 6.07. Thank you.

21 What's the significance of that frequency that you  
22 observed to the issue of whether the cashier can sit or stand?

23 A. The number of times, the number of items. So once in an  
24 hour, they are doing it six times.

25 Q. But in terms of being able to do that standing or sitting,

1 what's the significance of that?

2 **A.** Standing or sitting, when they are doing it standing,  
3 basically, their risk is lower than if they are doing it  
4 sitting.

5 **Q.** How often did you observe what you've described as back  
6 flexions?

7 **THE COURT:** May I?

8 **MR. WOHL:** Yes, of course.

9 **THE COURT:** You said this was normalized data,  
10 correct?

11 **THE WITNESS:** This per hour is the normalized, yes.

12 **THE COURT:** Normalized means that you extend from a  
13 smaller base to fill up the entire hour, on the assumption that  
14 they are working solid for one hour?

15 **THE WITNESS:** Yes, sir.

16 **THE COURT:** All right.

17 **THE WITNESS:** For example, sir, you -- the duration  
18 of -- the average duration of a transaction was 35 minutes.  
19 But the old --

20 **THE COURT:** Thirty-five seconds, you mean?

21 **THE WITNESS:** Thirty-five minutes.

22 **THE COURT:** Minutes? That can't be.

23 **THE WITNESS:** No.

24 **THE COURT:** Nobody would stay in business if it took  
25 35 minutes to get through the cashier line.

1           **THE WITNESS:** The duration of all transactions in that  
2 one hour was 35 minutes.

3           **THE COURT:** I see what you're saying. All right. And  
4 so then you extrapolated that to, basically, double the  
5 numbers?

6           **THE WITNESS:** Yes.

7           **THE COURT:** All right. So -- but in that 35 minutes,  
8 you saw roughly half -- half as many as that six and eight  
9 number, right?

10          **THE WITNESS:** In that one hour, sir, we saw these  
11 many -- these many.

12          **THE COURT:** Can you tell me what the raw data was?

13          **THE WITNESS:** This is the raw data.

14          **THE COURT:** Tell me, again, the raw data.

15          **THE WITNESS:** In this one hour, we found 6.07 times  
16 they lifted heavy items.

17          **THE COURT:** So they were working continuously through  
18 that one hour?

19          **THE WITNESS:** They were working only -- they were  
20 working for -- in that one hour, they worked for 35 minutes at  
21 the checkout counter. And when they were not working at the  
22 checkout counter they also, basically, were working -- they  
23 were not on the screen.

24          **THE COURT:** So in the 35 minutes only, how many times  
25 did they lift an object, a heavy object?

1           **THE WITNESS:** Excuse me, sir. Did you say lift or  
2 handle?

3           **THE COURT:** Let's take lift.

4           **THE WITNESS:** They lifted it 6.07 in that one hour.

5           **THE COURT:** So if it was normalized, why wouldn't it  
6 be 12 times?

7           **THE WITNESS:** I should not have used the word  
8 normalized. I think I misspoke.

9           **THE COURT:** Sounds like maybe you did.

10          **MR. WOHL:** Your Honor, I think he used normalized as  
11 to transactions, not as to time, actually.

12          **THE COURT:** What? Say that again.

13          **MR. WOHL:** I thought he used normalized with regard to  
14 transactions, not normalized as to time. But maybe I misheard  
15 him.

16          **THE COURT:** Well, he said earlier that it was 35  
17 minutes. And he extrapolated it as what it would be if it had  
18 been working for a solid hour. Okay. I can -- I can  
19 understand why you wouldn't want to do that.

20          On the other hand, you've backtracked off of that. So  
21 it's important to get your accurate testimony. So start over  
22 again, and tell us what that number represents.

23          **THE WITNESS:** So, I misspoke. It's normalized for the  
24 transactions. And there are -- in that one hour, with the  
25 premeasured, the absolute number was 6.07, the average. 6.07

1 heavy items were lifted.

2           **THE COURT:** In one hour?

3           **THE WITNESS:** In one hour, sir.

4           **THE COURT:** What was the 35-minute part then?

5           **THE WITNESS:** The 35 minutes, this is what I got  
6 confused and I misspoke.

7           The 35 minutes is -- in that one hour, 35 minutes of  
8 transactions occurred. And the other, close to 25 minutes  
9 there were no transactions.

10 **BY MR. WOHL:**

11 **Q.** So does that mean, Dr. Fernandez, that over 35 minutes  
12 there were 6.07 incidents of heavy merchandise being handled?

13 **A.** Yes. And it was not multiplied to expand it.

14           **MR. WOHL:** So, your Honor, do you understand that,  
15 then, it's just the 35 minutes?

16           **THE COURT:** Yeah.

17           **MR. WOHL:** But he observed for a full hour.

18           **THE COURT:** So in that full hour, what was the cashier  
19 doing when they weren't -- I don't want you to just guess at  
20 this.

21           Were they standing at the cash register waiting for the  
22 next customer? Were they counting money in the till? What  
23 were they doing during the 25 minutes that there were no  
24 transactions?

25           **THE WITNESS:** They would leave the cash register

1 counter, sir.

2 **THE COURT:** Would leave or did leave?

3 **THE WITNESS:** They did leave.

4 **THE COURT:** You saw that with your own eyes?

5 **THE WITNESS:** Yes, we saw them on the videos. Yes,  
6 they would leave. And the average would be -- they would --  
7 was between zero and 50 seconds.

8 **THE COURT:** So if that were typical, then what you're  
9 saying is that during an entire hour, the employee will do this  
10 heavy lifting six times per hour, and have about 25 minutes of  
11 time elsewhere in the store?

12 **THE WITNESS:** It would be elsewhere in the store. And  
13 I'm not sure what they were doing elsewhere in the store that  
14 particular time, yes.

15 **THE COURT:** Okay. I understand. All right. Okay.  
16 Good. Thank you.

17 **MR. WOHL:** Thank you, Your Honor. I appreciate you  
18 clearing that up.

19 **BY MR. WOHL:**

20 **Q.** Can you just give us the definition of a back flexing,  
21 just so we have that clear. What's a back flexing?

22 **A.** A back flexion is when your back leans forward in this --  
23 when you're doing this way (indicating). If you're moving it  
24 any other way, that's not called a back flexion. That might be  
25 a twist or abduction. This is a back flexion.



1 Q. All right. And just for the record, it looks like you are  
2 almost bowing?

3 A. Yes.

4 Q. You're moving your head and torso forward?

5 A. Right.

6 Q. How often did you observe the cashiers in the video  
7 demonstrating or displaying back flexions?

8 A. 67.63 times per hour.

9 Q. And what's the significance of a -- of frequent back  
10 flexions with regard to sitting?

11 A. The back flexions would -- the back flexions, the number  
12 might be the same, but the -- but the posture would be more or  
13 about the same. But for sure the risk is going to increase.

14 Q. And why is that?

15 A. The risk would increase because -- because of the angle,  
16 the hip angle, which is different. And that's how you  
17 calculate the biomechanical stress in your low back, in the  
18 L4-L5. That's how one calculates it.

19 If one calculates it, it's always going to be higher in  
20 the seated position when compared to a standing position.

21 Q. All right. Thank you, Dr. Fernandez.

22 MR. WOHL: Your Honor, at this time, I think it would  
23 be good for us to play the videos. You had requested on Friday  
24 that we come up with 15 minutes of a continuous video stream.  
25 We've done that. And then we have several others that are

1 relatively short, that we'd like to show.

2 I would like to ask, would your Honor prefer that  
3 Dr. Fernandez stay silent and you watch the videos, or would  
4 you want him to offer any observations or commentary during the  
5 videos?

6 **THE COURT:** No, no, he could offer commentary, I  
7 guess. Occasional commentary, I think that would be helpful.

8 **MR. WOHL:** Thank you, your Honor.

9 **THE COURT:** Which one are you going to play first?

10 **MR. WOHL:** So, first off, your Honor, this is all part  
11 of Exhibit 218-G, which has already been received into  
12 evidence.

13 So I have the technician identifying things by a simple  
14 digit number, which I'll tell him to play, but then I'll  
15 identify the file number. That way it will match up with the  
16 exhibit designation. And I'm sure my team will keep me  
17 completely honest in this regard.

18 So, first, for the 15-minute video, we're going to show --  
19 actually, we are going to show it in split screen so you'll  
20 have both the bird's eye view that Dr. Fernandez testified  
21 about, and the angle view.

22 So there's two file numbers, accordingly. File number --  
23 bear with me, Madam Reporter -- 128\_02, the duration is  
24 14:29:50 through 14:44:50. And the second view is file number  
25 22\_01. And, of course, the time durations are the same because

1 it's the same episode.

2           **THE COURT:** And the time of day and the day of this is  
3 what?

4           **MR. WOHL:** So 1444, your Honor, I believe, means it's  
5 2:44 in the afternoon.

6 **BY MR. WOHL:**

7 **Q.** Is that correct, 1444?

8 **A.** 1444 is 2:40 is the evening, yes.

9 **Q.** Afternoon. Thank you.

10           **THE WITNESS:** Afternoon.

11           **THE COURT:** Afternoon. All right. And what day of  
12 the week was it?

13           **MR. WOHL:** I was going to ask.

14           What day of the week is this? It will be time stamped.  
15 It will show up on the video, your Honor.

16           **THE COURT:** What day of the week, Saturday or  
17 Wednesday?

18           **MR. WOHL:** That we could try to find out for you  
19 momentarily. If you tell me what day it is --

20           **THE COURT:** I have a calendar here. What is the day?

21           **THE WITNESS:** August the 8th.

22           **THE COURT:** Of last year or --

23           **THE WITNESS:** This year, sir.

24           **THE COURT:** August 8th is a Wednesday of this year,  
25 2012.

1           **MR. WOHL:** That's correct, Your Honor.

2           **THE COURT:** All right. We will all be silent. The  
3 court reporter will take down only the spoken word, but nothing  
4 that is on the tape-recording.

5           **MR. WOHL:** These tapes are actually silent, your  
6 Honor, so there is no fear of that.

7           (The designated video is played in open court.)

8           **THE WITNESS:** A customer is waiting, and there is no  
9 CSA at the register.

10          (Video continues.)

11          **THE WITNESS:** Using the hand scanner to scan some  
12 rugs. She's got -- the customer has put a number of items in a  
13 mop pail.

14          (Video continues.)

15          **THE WITNESS:** Here she's scanning some items.

16          (Video continues.)

17          **THE WITNESS:** She's reaching, scanning.

18          (Video continues.)

19          **THE WITNESS:** The pail was used not for -- as a  
20 basket, but they did not use a cart. And they disposed of it  
21 under the register.

22          (Video continues.)

23          **THE WITNESS:** She's twisting her back slightly, and  
24 now she's going to bag. She's moved from the small box area to  
25 the bagging area, the bagging table.

1 (Video continues.)

2 **THE WITNESS:** She's entering something on the  
3 keyboard. She's bagging.

4 (Video continues.)

5 **MR. WOHL:** May I ask Dr. Fernandez that if he observes  
6 anything that he described in terms of steps or flexing, if he  
7 just points that out to the Court, I think that would be  
8 helpful, as well.

9 (Video continues.)

10 **THE WITNESS:** Seeing a large item being bagged.

11 (Video continues.)

12 **THE WITNESS:** There are a number of steps here as she  
13 moves forward to retrieve another item.

14 (Video continues.)

15 **THE WITNESS:** This is a 12-pack, which she scanned and  
16 then placed on the -- on the bagging table.

17 (Video continues.)

18 **THE WITNESS:** She's moving from -- she's twisted --  
19 not twisted. She moved from looking at the scanner to looking  
20 at the register now. She's using the touch screen and the  
21 keyboard.

22 (Video continues.)

23 **THE WITNESS:** She's opened the till and the till box  
24 out. She steps back a bit. She's helping the customer with  
25 the -- with the credit card machine. Now she's scanning

1 container. I suspect that was coolant or something of that  
2 nature.

3 (Video continues.)

4 **THE WITNESS:** She's taking a few steps. She's bagging  
5 it.

6 (Video continues.)

7 **THE WITNESS:** Some extended reaches while she goes  
8 ahead and operates both the keyboard and trying to reach out  
9 for an item.

10 Again, she's using the till.

11 Picked up the receipt and gave it to the customer.

12 (Video continues.)

13 **THE WITNESS:** Another customer comes in.

14 (Video continues.)

15 **THE WITNESS:** She's using a hand scanner and places  
16 this rug on the bagging table.

17 She scans a few more items.

18 The customer places things in different locations.

19 The CSA is moving around the whole work area.

20 She's scanning some clothe [sic] items, smaller clothe  
21 items. She's got rid of a hanger in the bin underneath the  
22 cash register.

23 She scans something in the cart on the other side. While  
24 she did that, she was -- it was flexion of her back. She  
25 reached out to put the bag in the cart.

1 (Video continues.)

2 She is assisting the customer in the survey, customer  
3 survey that is conducted.

4 She's walking around. In fact, she's cleaning up -- I  
5 wouldn't call that the aisle, but the work area. Something was  
6 dropped down. She's picking it up. And she is disposing it in  
7 the bin underneath there, under the cash register.

8 (Video continues.)

9 **THE WITNESS:** There's reaching and there's movement of  
10 the feet.

11 (Video continues.)

12 **THE WITNESS:** She's opened the till again. She's  
13 standing in front of the register at the moment. She's -- she  
14 got the receipt, and then she got the coupon.

15 Now she's giving the change and the receipt and the coupon  
16 to the customer. She moved to get that.

17 She just gave the receipt to the customer.

18 (Video continues.)

19 **THE WITNESS:** She's scanning some items in the cart  
20 there. While she did that, there's flexion. Now there's  
21 extended reaches with the left arm.

22 (Video continues.)

23 **THE WITNESS:** She's putting the bag in the cart  
24 through the area between the bagging area and the demagnetizer.

25 (Video continues.)

1           **THE WITNESS:** The customer is answering the survey.

2           (Video continues.)

3           **THE WITNESS:** She's leaning over. There's twisting of  
4 the back. Arms are over the shoulder.

5           (Video continues.)

6           **THE WITNESS:** The next customer she's reaching out,  
7 extended reaches.

8           (Video continues.)

9           **THE WITNESS:** Reached out with the coupon and gave the  
10 receipt to the customer.

11          (Video continues.)

12          **THE WITNESS:** Scanned, now bagging the item, placed it  
13 on the bagging table.

14          (Video continues.)

15          **THE WITNESS:** Opened the till again.

16          (Video continues.)

17          **THE WITNESS:** The receipt is being printed, and she's  
18 taking out the change.

19          (Video continues.)

20          **THE WITNESS:** She steps forward, picks up the receipt,  
21 turns around and gives the money and the receipt to the -- to  
22 the customer.

23          The next client comes in, and she's scanning items,  
24 reaches out, picks up the item, scans the item.

25          (Video continues.)



1           **THE WITNESS:** She's folding items as -- as she gets  
2 them. Scanning, using the hand scanner.

3           (Video continues.)

4           **THE WITNESS:** She's bagging some items now.

5           (Video concluded.)

6           **THE WITNESS:** That's the end of the 15 minutes.

7           **MR. WOHL:** That concludes the 15 minutes, your Honor.

8           **THE COURT:** Okay.

9           **BY MR. WOHL:**

10          **Q.** Dr. Fernandez, did you see examples in that video of back  
11 flexings [sic] that you described?

12          **A.** Yes, there were back flexions there.

13          **Q.** Did you see examples of steps or movements that you  
14 described before?

15          **A.** Yes, I did.

16          **Q.** Did you see examples of extended reaches?

17          **A.** Yes.

18          **Q.** Did you see examples of twists, twisting?

19          **A.** Twisting, yes. At the back, yes.

20                 **MR. WOHL:** Thank you, Your Honor.

21                 We're now going to go to a series of relatively short  
22 videos that will illustrate some additional points. So let's  
23 go with what we designated as 3.

24                 And, your Honor, again, this is all part of Exhibit 218-G.

25                 3 is file number 429\_5. This occurred on August -- better

1 prepared this time, your Honor -- August 7, 2012, on Tuesday.  
2 And the time elapsed is 11:15:25, 11:15 in the morning, to  
3 11:18, just three minutes later. Could we have that one  
4 played, please.

5 (Video played in open court.)

6 **BY MR. WOHL:**

7 **Q.** Dr. Fernandez, in terms of time, if you can just observe  
8 what you're seeing relative to what we've been talking about.

9 **A.** She's using a hand scanner and scanning items,  
10 demagnetizing it. Give it back to the client. Set it for the  
11 client. She's using the hand scanner and scanning some items.

12 She's scanning it. Reaching out. Picking up an item,  
13 scanning it. She leans over and bends over, and there's  
14 flexion. And she scans an item in the cart.

15 She puts quite a few items, and now that's what we also  
16 would consider heavy items. Now it's in a bag.

17 **Q.** Heavy items because of the number of items in the bag; is  
18 that what you mean?

19 **A.** Yes.

20 (Video continues.)

21 **THE WITNESS:** She is bending over.

22 **MR. WOHL:** Please speak up, Dr. Fernandez.

23 **THE WITNESS:** She is scanning the items, and she's  
24 bagging it. And she's moving as she is doing all of this.

25 But then she places it on the bagging table. Each of

1 these CSAs have different techniques.

2 Now, the box of Tide, she hand scanned it, put it in  
3 the -- put it in the bag. And there was something else in the  
4 bag, as well. So that would be considered heavy item.

5 (Video continues.)

6 **THE WITNESS:** There she's using her keypad, standing  
7 sideways. Now she's standing in front of the demagnetizer.  
8 Open the till. Before that, use the keypad. Takes out a  
9 receipt. Extended reaches.

10 And now extended reach, while she did that one of her  
11 feet -- her foot was off the floor when she reached out there.  
12 And she gave the receipt and the coupon to the customer.

13 **MR. WOHL:** Would the Court wish to see, again, where  
14 she lifts her foot? Are you satisfied from his description?

15 **THE COURT:** I followed it.

16 **MR. WOHL:** Thank you, Your Honor.

17 Let's move on to the next one we designated, number 4.  
18 This is file number 93\_1. This was taken on August 13, 2012.  
19 That's a Monday. And it starts at 9:54:13, and concludes at  
20 9:55:25.

21 (Video continues.)

22 **THE WITNESS:** Reaching out and scanning. Reaches out,  
23 scans another item. Then she scans twice because it didn't  
24 scan the first time. She scans it. This one is having a  
25 little problem scanning this item. She had -- she scans it

1 again. Yet another item. Sorry.

2 (Video continues.)

3 **THE WITNESS:** She started bagging. Moved to the  
4 bagging area, so she stepped a few -- she walked out there.  
5 She places both those bags on the bagging counter.

6 There are different techniques to bag. Some of them bag  
7 one at a time, and sometimes they place the bag there and then  
8 walk back and forth.

9 (Video continues.)

10 **MR. WOHL:** Next one we've coded as number 5. This is  
11 file 192\_02. This was taken on August 12, 2012, which was a  
12 Sunday. It begins at 17:26, which would be 5:26 in the  
13 afternoon, extending to 17:29, or about three minutes later.

14 (Video continues.)

15 **MR. WOHL:** I'm sorry, I think there's two -- they are  
16 split view. I apologize. Can you stop for one second, so I  
17 can recite the second part.

18 So that's one view. And the other view is number file  
19 number 186\_01. And, again, the same time, same date, same  
20 duration.

21 Thank you.

22 (Video continues.)

23 **THE WITNESS:** She reaches out, extended reaches. She  
24 goes ahead and picks up an item, scans it. Picks up another  
25 item. Scans it and now bags it, and places it on the bagging

1 area, the bagging area.

2 (Video continues.)

3 **THE WITNESS:** She scans this particular item, and then  
4 she throws it in the -- in the bin down there, which she'll  
5 have to go ahead and put back again because this particular  
6 item had the same -- seems had the same, similar, but didn't  
7 have a bar code.

8 (Video continues.)

9 **THE WITNESS:** She's reaching out for items. When  
10 she's folding it, her arms are way over her shoulder. She's  
11 using the hand scanner, picks up an item, uses the hand  
12 scanner. She leaned over and scanned something in the cart, as  
13 well.

14 (Video continues.)

15 **THE WITNESS:** She's scanning items and folding some of  
16 the clothes now.

17 She scans them when they don't need folding. These are  
18 not clothes, clothing items.

19 (Video continues.)

20 **THE WITNESS:** She's entering some numbers on the  
21 keypad, on the keyboard. Reaching out to the customer,  
22 returning something to the customer. Now she's going to bag  
23 the items.

24 She is bagging these multiple items. She moved to the  
25 bagging table and that's where she's bagging the items.

1           **MR. WOHL:** All right. Next one, 6, file number  
2 192-02. This was taken, also, on August 12, which is a Sunday.  
3 And this runs from 2 -- excuse me, 1740, or 5:40 in the  
4 afternoon, to 17:42, or two minutes later.

5           (Video continues.)

6           **THE WITNESS:** She's reaching out to pick up an item.  
7 Then it's placed at the counter, pretty much at the end of the  
8 counter. Now she reaches out and picks up these one, two --  
9 six --

10 **BY MR. WOHL:**

11 **Q.** Is that an example of the extended reach, Dr. Fernandez?

12 **A.** Extended reaches, yes.

13 **Q.** Does her foot leave the ground there?

14 **A.** She went and pulled all of those six, and while she did  
15 that she lifted a foot to reach that point.

16           (Video continues.)

17 **A.** Neck twist. Slight back twist, as well. Neck is twisting  
18 around.

19           Bag three of those containers, and she's placed it on the  
20 bagging table. She's reaching out and bagging three more. And  
21 she's moved, another extended reaches. There's shoulder  
22 flexion as well.

23           She's helping the client, the customer with the credit  
24 card -- with the credit card machine. The receipt is being  
25 printed. She gives the receipt to the customer.

1 Q. No. 7 taken on August 10, 2012, which was a Friday. File  
2 No. 58\_01, running from 20 or 8:00 o'clock in the evening until  
3 20:01:05.

4 (Videotape played in open court.)

5 A. She reaches out, accepts an item, scans it, puts it in a  
6 bag. Picks the bag and gives it to the client, who then puts  
7 it in the cart. Goes ahead and reaches to quite a distance of  
8 extended reaches. Scanning and bagging it. Reaches out, scans  
9 it, bags it, moves.

10 Q. No. 8. Taken on August 10, 2012. That was a Friday.  
11 File No. 160-02, starting 16:46:51 or 4:46 in the afternoon,  
12 extending to 16:47:06. It's a pretty short one right here.

13 (Videotape played in open court.)

14 A. Try scanning it here and she can't scan it. She comes out  
15 of the box and she has to scan it there. It's a bottle of  
16 water -- bottles of water.

17 Q. No. 9, taken August 9, 2012. That was a Thursday. File  
18 No. 567\_06. Duration starting at 13:07:40, or 1:07 in the  
19 afternoon, to 13:07:53.

20 (Videotape played in open court.)

21 A. Accepts an item, scans it with a hand scanner. She's  
22 leaning over. Goes out of the position itself. There is  
23 movement. Extended reaches. Reaching out and to put it on the  
24 bagging table.

25 Q. That was No. 8, correct?

1 No. 9 is August 9, 2012, a Thursday. File No. 567\_06  
2 commencing 13:07:40 or 1:07:40 in the afternoon. Actually,  
3 that looks like -- it's different I guess. Maybe I misread 8  
4 then. I apologize.

5 Are we on 9? We're on 9. I might have misstated the time  
6 on 8 then.

7 Anyway, 13:07:40 to 13:07:53.

8 (Videotape played in open court.)

9 **A.** Isn't this the same one?

10 **MR. WOHL:** Did I skip 8 or did we cover 8 then?

11 **DEFENSE TECHNICIAN:** We covered 8.

12 **MR. WOHL:** So I'm just doing 9 again. I apologize.  
13 We'll go to 10. How is that?

14 **BY MR. WOHL:**

15 **Q.** No. 10 is August 13, 2012. File No. 101 -- which was a  
16 Monday. File No. 101-01 starting at 17:05:33, or 5:05 in the  
17 afternoon, extending to 17:06:07.

18 (Videotape played in open court.)

19 **A.** She's going to lean over, scanning. There's flexion of  
20 the back. Another scan in the cart, use the hand scanner.  
21 Scans. Places the item on the demagnetizer. She's scanning  
22 items here.

23 **Q.** Okay. Just a few more. We're now at No. 11, and here  
24 we'll show both views. So the first one is File No. 8311. And  
25 the second one is File No. 189\_02. Both, of course, same time



1 duration, starting at 14:57:49, which is 2:57, extending to  
2 14:58:00 and these were taken on August 12, which was a Sunday.

3 (Videotape played in open court.)

4 **A.** She's going ahead and using the cash register -- the  
5 credit card machine. She bends over. Extended reaches.

6 Now she's bending down, picks up a large bag. She's  
7 activating that credit card machine again. She's bagging  
8 multiple clothing items. She's at the bagging counter. Walks  
9 over to the cash register.

10 **Q.** No. 12. Again, two views. File 498\_05 and 605\_06.  
11 Starting at 19:04:00, or 7:04 in the evening -- 19:04:40 and  
12 extending to 19:05:17. And these were taken on Saturday,  
13 August 11, 2012.

14 (Videotape played in open court.)

15 **A.** She's reaching out and while she's doing that, her left  
16 foot -- she's on her toes there while she's trying to get the  
17 coupon.

18 This is the touch screen. The printer print a receipt.  
19 She reaches out there, extended reaches. It's overhead, over  
20 her shoulder. She's giving the receipt and the coupon to the  
21 customer.

22 **Q.** Okay. Now we'll go to the last two. The one we designate  
23 as 2, which is File No. 21703, commencing at 12:21:39 to  
24 12:24:07, and this was taken on Tuesday, August 7.

25 (Videotape played in open court.)

1 A. She reaches out and picks up the -- picks up the receipt.  
2 Now she's leaning over, bracing herself while she's doing this  
3 and she's standing sideways, slightly sideways.

4 Q. Do you have any understanding why she's standing sideways,  
5 Dr. Fernandez?

6 A. I would suspect the 27 inches is -- might be slightly --  
7 might be tight for her if she stands square.

8 Q. For the record, would you describe her as a heavyweight  
9 woman?

10 A. She's a heavysset woman, yes.

11 She went and scanned something and now she's leaning over  
12 and performing her -- at the moment this is an extended reach.

13 Q. All right. One more and we're done. Finally we'll go to  
14 13 taken on August 8, a Wednesday. File No. 135\_02, lasting  
15 from 21:41:09, or 9:41 in the evening, until 21:42:45.

16 (Videotape played in open court.)

17 A. CSA comes in, picks up a bin and walks away. She's  
18 going -- some work she's doing with what she has in that bin.

19 Here we see her again in view. These bins are pretty  
20 large and some of these items are on the larger side. She's  
21 taking out another bin now. These seem to be hangers.

22 That concludes this video.

23 Q. Dr. Fernandez, what do these videos tell you about whether  
24 Kmart cashiers can perform their job duties while seated?

25 A. These videos basically show that the Kmart cashiers move

1 quite a bit in their work area. There's flexion of the back.  
2 There is extended reaches. They are picking up items, either  
3 that are -- we've seen them reaching out for items that are  
4 pretty heavy. Seen them lifting and bagging items that may not  
5 alone be 10 pounds, but when you add them up, they could well  
6 be over 10 pounds.

7 We're seeing them fold clothes well over their shoulders.  
8 And when they are doing that, sometimes they need the space so  
9 they are stepping back so the garment can hang. And some of  
10 these are or all of these activities -- the folding of the  
11 clothes would be next to impossible to perform in a seated  
12 position, especially when you've got to lift it up and move  
13 back. Some of those extended reaches would be -- would be next  
14 to impossible to perform, even if you had knee clearance.

15 Those -- those movements within the work area, the CSA  
16 would have to get off the high seat to move to these various  
17 points if they were required to do all of this, those  
18 particular tasks.

19 **Q.** And the video that we saw with the heavysset woman, would  
20 she be able to use a seat or would she be able to use the same  
21 kind of seat that other cashiers that you saw use?

22 **A.** It would be difficult for her to use the same sort of  
23 seat. She would need a seat that has a larger seat pan to  
24 support her and possibly also a large -- these seats come in  
25 different cylinder sizes. So the regular cylinder for the

1 weight, and then you have stronger cylinders that can bear the  
2 weight of a heavier individual.

3 Otherwise, what you tend to do is if you use -- heavy  
4 individuals tend to sit down on one of these adjustable seats.  
5 You bust the air cylinder. So we're talking about a different  
6 type of seat.

7 **Q.** If she tried to use a seat that the other cashiers use,  
8 would that present sort of a safety risk for her?

9 **A.** It would be a safety risk for her, yes, and the seat would  
10 break.

11 **Q.** She might fall?

12 **A.** The seat -- she would -- if she did sit in that seat  
13 before it broke, she would not be comfortable. There would be  
14 what we call soft tissue compression. Parts of her body would  
15 not be supported and the edges would cut into parts of her  
16 thigh, under thigh.

17 **MR. WOHL:** Are we still good, your Honor? Do you want  
18 to take a break or are we good?

19 **THE COURT:** Is this a good point? How much longer do  
20 you have a direct?

21 **MR. WOHL:** Probably about another half hour or so,  
22 your Honor.

23 I wouldn't mind getting one point in before we break now  
24 that I think about it. This would be a good place for it.

25

1 BY MR. WOHL:

2 Q. Did you also take dimensions of Tulare cashiers when you  
3 were there?

4 A. I did take dimensions of 10 Tulare cashiers.

5 Q. And what dimensions specifically did you take?

6 A. The stature, that's the standing height, the shoulder  
7 height and the elbow standing height.

8 Q. And what did you find in that regard?

9 A. Found that the stature, the averages were below the  
10 averages -- below the average. Six out of the ten of them were  
11 below the 50th percentile female.

12 Q. If they were to use an stool or other elevated seat to  
13 work at that checkout stand, would they need some sort foot  
14 rest?

15 A. They would certainly need a foot rest. The height of that  
16 foot rest is what is going to have to be adjustable.

17 Q. How high would the foot rest need to be to properly  
18 support the cashier of the average height that you measured?

19 A. About 12-some inches. 12 inches off the floor.

20 Q. So about a foot off the ground?

21 A. Yes, sir.

22 Q. And what would that mean in terms of their actual usage of  
23 the foot rest?

24 A. To get on the seat, they would have to climb on the seat.  
25 The question is: How did they climb on the seat? Do you use

1 the foot rest to climb on the seat? And where is the location  
2 of this foot rest? Because the ring around the chair is not a  
3 foot rest.

4 **Q.** In your view would that be an ergonomically sound setup to  
5 have somebody step up on a foot long 00 or foot high foot rest  
6 to get onto the seat?

7 **A.** A foot high foot rest would pose -- would pose a trip  
8 hazard, getting on and off the seat using that kind of a foot  
9 rest.

10 **Q.** Thank you.

11 **MR. WOHL:** Now might be a good time, your Honor.

12 And, also, if I could ask the Court's indulgence, can you  
13 tell me where I am -- or where the defense is on time overall  
14 just so we know how much time we have?

15 **THE COURT:** You have used -- this is a quick add-up,  
16 which I just did. Looks likes 610 minutes out of 720.

17 **MR. WOHL:** Thank you.

18 **THE COURT:** And the plaintiff has used 410.

19 **MR. WOHL:** Okay. That's very helpful.

20 **THE COURT:** You've used 200 minutes more. I thought  
21 we were going to finish today.

22 **MR. WOHL:** We certainly will, your Honor.

23 **THE COURT:** Well, yes, but the other side gets to  
24 cross examine.

25 **MR. WOHL:** Really? Is that how that works here?

1           **THE COURT:** That's how it works. So you should, you  
2 know -- all right. Think about that.

3 All right. 15 minutes.

4           **MR. WOHL:** Thank you, your Honor.

5 (Whereupon there was a recess in the proceedings  
6 from 11:00 a.m. until 11:18 a.m.)

7           **MR. WOHL:** Can I take this opportunity to move in a  
8 few more items into evidence that we did not do yet, so we're  
9 clear?

10           **THE COURT:** All right.

11           **MR. WOHL:** First one is 244.

12           **THE COURT:** Any objection?

13           **MR. DOSTART:** Which one is 244?

14           **MR. WOHL:** 244, I believe, was the NIOSH document that  
15 we examined Dr. Fernandez about.

16           **MR. DOSTART:** Is it the chart that appears in his  
17 report that you're moving into evidence or the entire article?

18           **MR. WOHL:** Just the excerpt of it.

19           **MR. DOSTART:** I wasn't sure of that. 244 is just the  
20 excerpt?

21           **MR. WOHL:** Right.

22           **THE COURT:** Show it to me with the official tag on it.

23           **MR. WOHL:** I think Dr. Fernandez has it.

24           **THE COURT:** You look at it. Put your eyes on it and  
25 see if the document that is labeled 244 meets with your

1 approval.

2           **MR. DOSTART:** It does not, your Honor. Mr. Wohl's  
3 representation is inaccurate. It appears there are pages here  
4 that do not appear in Dr. Fernandez's report that are included  
5 within Exhibit 244.

6           **MR. WOHL:** Well, your Honor, the requirement isn't  
7 that you reproduce the entire article in the report. The  
8 content of this is what he references in his report.

9           **THE COURT:** It's hearsay. It's not received in  
10 evidence.

11           **MR. DOSTART:** Good try.

12           **MR. WOHL:** Your Honor --

13           **THE COURT:** It's hearsay. Mr. Wohl, it's hearsay.

14           **MR. WOHL:** Your Honor, he identified --

15           **THE COURT:** So what? What if he identified the  
16 San Francisco *Chronicle*, would that mean the entire *Chronicle*  
17 could come into evidence?

18           **MR. WOHL:** If he relies upon it for his expert  
19 opinion, I think so, your Honor.

20           **THE COURT:** No, it doesn't. It's discretionary with  
21 the judge whether an item relied upon by the witness comes into  
22 evidence. He's entitled perhaps to rely upon it in forming his  
23 opinion. He can testify about it, but that does not mean the  
24 document itself comes in. The rule expressly says this.

25           **MR. WOHL:** Your Honor, may we admit then



1 Exhibit 244-3, which is the Table 1 "Evidence for Causal  
2 Relationship Between Physical Work Factors and MSDs." That  
3 table is, in fact, reproduced in his report.

4 **THE COURT:** There was some table that was admitted  
5 into evidence. What was the table number?

6 **MR. WOHL:** Table No. 1, Evidence for Casual -- it  
7 could be casual.

8 ...Causal Relationship Between Physical Work Factors and  
9 MSDs.

10 **MR. DOSTART:** Your Honor, I'd just like to be clear.  
11 We already have admitted into evidence the table that is  
12 Dr. Fernandez's report.

13 **MR. WOHL:** It's a different table, counsel. This is  
14 the table from NIOSH which the witness identified and  
15 authenticated and said that he had presented his report and  
16 said this was part of his -- a basis for his opinion.

17 **MR. DOSTART:** Then, once again, I would like to see  
18 where in the report it is. And if it's in the report, then I  
19 have no problem with moving it into evidence.

20 I believe it's this table (indicating)?

21 **MR. WOHL:** Yes, counsel. That table.

22 **MR. DOSTART:** No objection to that page, your Honor.

23 **THE COURT:** All right. What is it?

24 **MR. WOHL:** 244-3.

25 **THE COURT:** 244-3. And describe it in three or four

1 words. Table of what?

2 **MR. WOHL:** Evidence for Causal Relationship Between  
3 Physical Work Factors and MSDs.

4 **THE COURT:** All right. Received in evidence.

5 (Trial Exhibit 244-3 received in evidence)

6 **MR. WOHL:** Could we include the title, Page 244-1,  
7 just so the Court know what's we're talking about?

8 **THE COURT:** No. I'm letting in evidence what's in his  
9 report, not what's in the -- not the separate document that is  
10 from NIOSH.

11 **MR. WOHL:** Well, he cites to the title of the  
12 publication. It just tells you where the table came from, your  
13 Honor. It's just context, that's all.

14 **MR. DOSTART:** We would object to that, your Honor.  
15 There's a --

16 **THE COURT:** It's going to be the page that was in his  
17 report.

18 **MR. WOHL:** All right, your Honor. Thank you.

19 And then 228-A, which was an excerpt of the Chafen article  
20 which we had an extended discussion about, and your Honor did  
21 rule that was part of his report.

22 **THE COURT:** That doesn't mean it comes into evidence.  
23 That just means it was part of his report and he can testify  
24 about it.

25 What is the article?

1           **MR. WOHL:** This was the Chafen study.

2           **THE COURT:** Exhibit 228?

3           **MR. WOHL:** 228-A.

4           **THE COURT:** Any objection to that one?

5           **MR. DOSTART:** I would like to see 228-A.

6           **MR. WOHL:** (indicating).

7           (Document was tendered to counsel.)

8           **MR. DOSTART:** Sorry about all this, your Honor.

9           **THE COURT:** These should have been moved at the time  
10 so we had it when it was fresh.

11           **MR. DOSTART:** We have the identical problem. 228-A is  
12 the entire article. The entire article does not appear in Dr.  
13 Fernandez's report. We would object to the admission of the  
14 entire article.

15           **THE COURT:** What do you say to that Mr. Wohl?

16           **MR. WOHL:** I don't think it's the entire article, your  
17 Honor. I think it's an excerpt, although I will double check  
18 to be sure.

19           (Brief pause.)

20           **MR. WOHL:** It's not the entire article, counsel.  
21 Please represent correctly to the Court. That's a three  
22 pages excerpt.

23           **THE COURT:** Is it more than is in his report?

24           **MR. WOHL:** Well, he doesn't reproduce the entire text.  
25 I think the basic essence of it is, yes, there are some things

1 that were not in the report. Yes, it's true.

2 **THE COURT:** The objection is sustained. It's hearsay.

3 **MR. WOHL:** All right, your Honor. Thank you.

4 Finally, by way of clean-up, all of the videos have  
5 already been admitted into evidence, but we think it would  
6 benefit the Court if we could separately admit and, therefore,  
7 you'll have immediate access to all the videos that I went  
8 through with Dr. Fernandez just now.

9 **THE COURT:** That's fine. What are those numbers?

10 **MR. WOHL:** Those are what I have already read into the  
11 record, your Honor. So I hope I don't need to do that again,  
12 but those were all already --

13 **THE COURT:** You would need to give it to me because I  
14 didn't make a note of it at the time.

15 **MR. WOHL:** All right. We will do that, your Honor.

16 **THE COURT:** My intention is to allow them in, but they  
17 are not in yet. And you need to follow-up on this pronto today  
18 so that I can put it on my list.

19 **MR. WOHL:** We will do that, your Honor. Thank you.

20 And then also in that regard Mr. Adkins played a video  
21 that pertains to class member Nossamento (phonetic spelling).  
22 Again, the video is in evidence. We just want to give you the  
23 specific file numbers.

24 **THE COURT:** I will allow that one as well.

25 **MR. WOHL:** All right. Thank you, your Honor. That

1 takes care of that clean-up.

2 **BY MR. WOHL:**

3 **Q.** Okay. A couple other clean-up with Dr. Fernandez on the  
4 testimony.

5 You told Judge Alsup that you looked at -- or you measured  
6 on an hourly basis 35 minutes of transactions and 25 minutes  
7 which you describe as being away from the counter?

8 **A.** Twenty-five minutes of no transactions, which they were  
9 away from the counter or for a few seconds at the counter.

10 **Q.** All right. So that's a very important clarification. So  
11 does the 25 minutes include any of the time that they are at  
12 the check stand, albeit not involved in a transaction?

13 **A.** The minimum was zero and the maximum was 50. The  
14 average -- 50 seconds. The average was 15 seconds for 20 of  
15 those random acts.

16 **Q.** So 35 minutes after being engaged in a transaction?

17 **A.** Yes.

18 **Q.** Twenty-five minutes either not engaged in a transaction or  
19 away from the register, is that correct?

20 **A.** Yes.

21 **Q.** Thank you. Just wanted to clarify that.

22 Secondly, with regard to heavy items. When you designated  
23 something as a heavy item, was that a single heavy item?

24 **A.** No, not necessarily.

25 **Q.** So could it be a collection of items as well?

1 A. Yes.

2 Q. But the same criterion of 10 pounds or more?

3 A. Correct.

4 Q. Okay. Now, are you familiar with Dr. Steve Johnson?

5 A. Yes, I am.

6 Q. And how are you familiar with Dr. Johnson?

7 A. I met Dr. Johnson more than 25 years ago when I  
8 interviewed for a position at University of Arkansas.

9 Q. Are you familiar with him otherwise professionally in  
10 terms of your work in the field of ergonomics?

11 A. Professionally I've met him at a number of conferences,  
12 yes.

13 Q. Now, do you do work as an ergonomist the same or similar  
14 that Dr. Johnson does?

15 A. Dr. Johnson is an academic and does consulting. I'm a  
16 full-time consultant who is a part-time academic and I'm an  
17 engineer.

18 Q. Are you familiar with Dr. Johnson's proposed modifications  
19 to the Kmart check stand that he's presented in this case?

20 A. Yes. He's proposed three changes, the three changes I'm  
21 familiar with it.

22 Q. Okay. What three changes are you familiar with that  
23 Dr. Johnson has proposed?

24 A. The three changes he's proposed is remove the -- remove  
25 the shelving so there is knee clearance. Bring the bagging

1 counter close to the -- reduce that 21 inches so the bagging  
2 counter comes flush with the demagnetizer. And there was a  
3 third one.

4 Give me a second, please. I have it in my...

5 Q. You have your supplemental report in front of you,  
6 Exhibit 214. Would you care to take a look and see if it  
7 refreshes your memory?

8 A. Yes, please.

9 (Brief pause.)

10 A. And he provides foot rests.

11 Q. Are you aware of any other modifications that he's  
12 proposed?

13 A. Excuse me, sir?

14 Q. Are you aware of any other modifications to the Kmart  
15 check stand that he's proposed?

16 A. I based my rebuttal on those -- on those recommendations  
17 that he made.

18 Q. Okay. Then we'll limit our examination to those three for  
19 now.

20 Do you understand that his opinion is that with those  
21 modifications, the cashiers could perform the job duties while  
22 seated for at least part of the time?

23 A. Yes. That was his...

24 Q. And do you agree with his opinion in that regard?

25 A. No, I do not.

1 Q. Why do you disagree with his opinion in that regard?

2 A. I disagree because I believe the risk of MSD injuries of  
3 the upper extremities would increase. The risk of back  
4 injuries could also increase, and productivity numbers may  
5 decrease; but I do not have any -- I've not done any scientific  
6 evaluation of that.

7 Q. And can you explain the bases for the disagreement with  
8 his opinion as you have just described?

9 A. The upper extremities, because the way he would have to --  
10 once he -- there are some limitations in the electronics and so  
11 he could not -- he would not be able to get the seat right  
12 up -- right to the point where the work surface is at elbow  
13 height. So it would be below elbow height.

14 So below elbow height, the individuals would have to be  
15 working with their shoulders out or in this position  
16 (indicating). So the shoulders are much abducted. There is  
17 going to be shoulder fatigue.

18 And there has been research that has been done and  
19 reported where it's stated that individuals that sit and work  
20 grocery -- in the grocery industry are at higher risk for upper  
21 extremity shoulder problems.

22 Q. Any other basis for your opinion?

23 A. So that was the -- while moving around, the swiveling, the  
24 back, one would not go ahead and -- one would not be able to go  
25 ahead and -- you would have to swivel. When you're swiveling,



1 either the swivel of the chair wouldn't do the trick so you  
2 would have to twist the back.

3 When you're standing, you twist your back slightly or move  
4 around with your feet. So you're standing in front here of the  
5 cash register, you could place a few steps and then stand in  
6 front of the scanner.

7 If you're on a seat, you would either have to swivel and  
8 when you're swiveling, your feet on a foot rest, what you have  
9 to do is you have to lock your knees up and so -- you would  
10 have to lock some aspect of your lower extremities and the weak  
11 link is going to -- is the that's going to hurt.

12 So you have to lock it up because this lateral movement is  
13 while you're scanning and this movement is going to -- you will  
14 have to -- when you move swiveling, you have to have some  
15 locking mechanism and your body is going to be that locking  
16 mechanism.

17 **Q.** Any other basis for your disagreement with Dr. Johnson's  
18 proposed modifications?

19 **A.** I have listed some of them. Also, the foot rest --  
20 besides that, the foot rest, it would have to be adjustable  
21 because the small individual would need a foot rest -- the  
22 smallest individual, which is four feet eleven, this is the  
23 hypothetical five percent individual who we design for, would  
24 need a foot rest of four feet -- 14 inches and some-odd.

25 **Q.** Just so we're clear, you said five percent. Do you mean

1 five percentile?

2 **A.** Five percentile female.

3 **Q.** Can you explain that concept to the Court?

4 **A.** Five percentile female is the smallest female for body  
5 measurements. It's a statistical number. You do not get an  
6 individual that has those anthropometric measurements that has  
7 the fifth percentile person, but you design very often taking  
8 the fifth percentile right up to the 95th percentile male.

9 **Q.** So fifth percentile female means that what percentage of  
10 woman are taller than she is?

11 **A.** 95 percent of the women.

12 **Q.** And a 95th percentile of men, what percentage of men are  
13 shorter than he is?

14 **A.** 95 percent of the men are shorter than he is.

15 **Q.** So to accommodate a five percent female -- five percentile  
16 female in terms of adjusting the foot rest, how high would the  
17 foot rest have to be?

18 **A.** Fourteen inches and some-odd.

19 **Q.** Any other basis for your opinion of disagreeing with Dr.  
20 Johnson's modifications?

21 **A.** So it's the back twisting, the shoulder.

22 Also, when they would have to move, they would have to  
23 lift this chair or the seat. The seats --

24 **Q.** First, they would have to get out of the seat, I assume?

25 **A.** There is not enough space out there. It's very tight. So

1 if they get off the seat, hopefully, they wouldn't trip over  
2 these five legs. And when they get -- and if they have got  
3 to -- and if they have got to -- you need a back rest for the  
4 foot rest -- for your seat. You need a back rest because, to  
5 prevent the lordosis, to prevent the low back problems.

6 So if you don't have a back rest -- if you have a back  
7 rest, how are you going to scoot it under the work surface?  
8 It's going to be somewhere there.

9 The seat's available today with back rests. They weigh  
10 from about 20 pounds to the low 40 pounds. So if you go to  
11 move that, it's going to be problematic. It's -- when I say  
12 "problematic," it's going to violate some of the guidelines for  
13 lifting.

14 Q. Would you consider the time it would take for a cashier to  
15 get off of the seat, lift or push it off under the counter to  
16 the extent he could, and then move away.

17 Would that be considered value added time or no value  
18 added time?

19 A. That's not value added time.

20 Q. If the cashier were seated, as Dr. Johnson proposes, would  
21 there still be incidents of extended reaches?

22 A. Excuse --

23 Q. If the cashier were seated at the sales counter the way  
24 Dr. Johnson proposes that she be seated?

25 A. Yes.

1 Q. Would there still be -- would there still be occasion for  
2 extended reaches by that cashier?

3 A. Yes.

4 Q. And would it be worse than it was before, the same as  
5 before or better than before?

6 A. It could be the same or worse.

7 Q. And what would make it worse?

8 A. When it -- what will make it worse?

9 Q. Right.

10 A. They would not be able to get as close. Some of the  
11 cashiers might not want to move their seat and try to reach  
12 over because they are facing the cash register and now they  
13 have got to work on the scanner. And, you know, one would --  
14 one would not be able to reach both at the same time.

15 Q. In the videos we saw before the break, you identified  
16 several instances of extended reaches and there the cashiers  
17 were standing.

18 Could you see the cashiers performing the same extended  
19 reach that you saw if they were seated?

20 A. No.

21 Q. Is there an accepted -- well, let me ask you: Has there  
22 been any literature about what is considered sort of the normal  
23 reach for a seated employee?

24 A. For a seated employee --

25 Q. Right.

1 A. (Continuing) -- for design purposes Vaughn Putz Anderson,  
2 says -- who was a researcher at NIOSH, he recommends for design  
3 purposes a reach of 17 inches for seated -- sitting and  
4 21 inches for standing.

5 Q. Let me show the witness what's been marked as Exhibit 247.

6 (Document was tendered to the witness.).

7 Q. Tell me if you recognize that, Doctor.

8 A. Yes.

9 Q. And what is it, please?

10 A. This is the reference that I used in my report and this is  
11 the -- this is a page or the diagram that Vaughn uses in his  
12 book.

13 Q. And what does this diagram illustrate?

14 A. This diagram illustrates the reach, the maximum reaches or  
15 for design purposes -- I shouldn't say maximum. The reach for  
16 design purposes for sitting and standing.

17 Q. And the reach for seated again is what?

18 A. Seventeen inches.

19 Q. And the reach for stand -- I said for seated. I'm sorry.  
20 For seated is?

21 A. Seventeen inches.

22 Q. And the reach for standing?

23 A. Is 21 inches for design purposes.

24 Q. And this diagram that's Exhibit 247, does that appear in  
25 your report?

1 A. That does appear in my report, sir.

2 Q. And, in fact, do you know if this same diagram appears in  
3 a textbook that Dr. Johnson authored?

4 A. Yes, it does appear in Dr. Johnson's textbook.

5 MR. WOHL: Your Honor, I would move for the admission  
6 of Exhibit 247.

7 THE COURT: 247 --

8 MR. DOSTART: Just because of the issue we had this  
9 morning, I just want to view it.

10 THE COURT: Any objection?

11 MR. DOSTART: Once again, your Honor, 247 has a  
12 paragraph beneath the chart that I'm not sure is in Dr.  
13 Fernandez's report.

14 And it also contains the front page of the exhibit -- the  
15 front page of the article, which I know is not in Dr.  
16 Fernandez's report.

17 I have no objection to the chart itself being admitted  
18 into evidence.

19 THE COURT: May I see it, the exhibit?

20 (Document was tendered to the Court.)

21 THE COURT: Is this the same Anderson that testified  
22 here?

23 MR. WOHL: That's Johnson who testified your Honor.

24 THE COURT: Oh, Johnson, yes.

25 MR. WOHL: But that diagram appears -- as you recall

1 from my cross examine, that diagram appears in Dr. Johnson's  
2 textbook, the exact same diagram.

3 **MR. DOSTART:** And we have no objection as to the  
4 diagram, your Honor.

5 **THE COURT:** Well, in this case I'm going to let both  
6 pages in. This is No. 247.

7 **MR. WOHL:** Thank you, your Honor.

8 **THE COURT:** Not marked. I don't know why. It was in  
9 a folder. I don't know why it was not marked. I had put it on  
10 there myself.

11 **MR. WOHL:** I'm sorry, your Honor. It was not marked.

12 **THE COURT:** Take a look at it. I have put it on there  
13 just now.

14 **MR. WOHL:** Thank you. I appreciate it.

15 **THE COURT:** 247 received in evidence.

16 (Trial Exhibit 247 received in evidence)

17 **BY MR. WOHL:**

18 **Q.** Are you aware of any other guidelines that's put out for  
19 what is considered appropriate reach besides what Dr. Anderson  
20 put out?

21 **A.** There's other guidelines available. There is the  
22 California guidelines, as well as the Department of -- I've got  
23 the references and it says 15 inches.

24 **Q.** So 15 inches for if seated?

25 **A.** Fifteen inches is the recommendation.

1 Q. For both?

2 A. For both.

3 Q. So more conservative than Dr. Putz Anderson?

4 A. Yes.

5 Q. So when we talk about reach, what are we measuring from?

6 So, for example, looking at the sales counter at Kmart, where  
7 are you measuring the reach from?

8 A. Basically from the shoulder right up to the point where  
9 you grip onto something.

10 Q. If you're standing or seated, would the shoulder be  
11 relative to the same point with regard to the counter?

12 A. Depends whether you're standing up straight up like this  
13 or you're bending forward (indicating). If you're bending  
14 forward, of course, then your shoulder is up front and then you  
15 can reach.

16 Q. And the dimension that you said the depth of the counter  
17 was what?

18 A. Twenty-three inches.

19 Q. So, therefore, whether standing or seated, the stretch  
20 that Dr. Putz Anderson is saying should be sort of the  
21 normative would be less than the depth of the counter, correct?

22 A. That's right.

23 Q. Does NIOSH put out any guidelines about what should be  
24 done to minimize reach for employees?

25 A. For different industries NIOSH has got some, what they



1 called Health Hazard Evaluations over the years, but I don't  
2 think they are used as guidelines.

3 Q. So they don't put out anything with regard to where  
4 materials and tools should be placed relative to the worker to  
5 avoid extended reaches?

6 A. You're talking about in general?

7 Q. Yes.

8 A. In general, yes, they have got -- they have got guidelines  
9 for workers and so on. That's primary working area, or what we  
10 call the normal working area and the maximum working area, and  
11 they say work within your primary or your normal working area.

12 Q. And what's the recommendation about where tools and  
13 materials the employee would use should be located with regard  
14 to the primary work area?

15 A. It should be located within the primary working area or  
16 the normal working area.

17 Q. And what is the purpose of that relative to reaches?

18 A. So as to basically -- basically the normal working area is  
19 the reach. If you drop your arm down and you -- it's an arch  
20 both sides, so as to minimize fatigue and minimize the risk of  
21 injury.

22 Q. So with regard to what we saw on the videotapes of  
23 cashiers working at the sales counter, did you see any  
24 incidents in which they had to reach or move to areas to do  
25 their work that was outside of what would be considered the

1 normal work area or reach area if they were seated or standing  
2 right in front of the counter where the scanner is?

3 **A.** Yes.

4 **Q.** Do you see that often?

5 **A.** It occurred, yes.

6 **Q.** And, again, what's the danger of extended reaching? The  
7 employee does too much extended reaching?

8 **A.** It depends how -- well, it depends. Extended reaches  
9 would basically increase the biomechanical stress on your  
10 shoulder. It depends on the weight you're lifting and how  
11 heavy your arm is, because your arm is also a weight. So it  
12 depends on how long, how far away it is, one.

13 And, two, how heavy your arm is and what weight you have  
14 got at the other end.

15 **Q.** With regard to installing the stool, do you have any  
16 concerns about using a higher seat or stool in the Rite Aid  
17 check stand as configured?

18 **MR. MATTHEW RIGHETTI:** I don't think this case is Rite  
19 Aid, your Honor.

20 **MR. WOHL:** I said Rite Aid? I apologize. Kmart.  
21 Thank you, counsel. Kmart.

22 **BY MR. WOHL:**

23 **Q.** Do you have any concerns about his recommendation of  
24 putting a higher stool or seat at the Kmart check stand?

25 **A.** Do I have reservations? Is that what you said, sir?

1 Q. Yes, yes.

2 A. I have reservations because of the space limitations, as I  
3 mentioned earlier; the getting on and off the seat, how they  
4 would move the seat, and how they would stow the seat. And  
5 while swiveling on the seat itself, is there enough space?  
6 Would they be knocking their knees? Would they be hurting  
7 themselves? I don't know how this would work.

8 Q. And do you believe that even while seated, they would  
9 engage in any other types -- so not getting off the stool,  
10 staying on the stool.

11 From what you saw do you believe they would engage in any  
12 other movements, reaches, twists, bends that would be  
13 inconsistent with that ergonomic set-up?

14 A. They would be engaged in those movements. Plus, they  
15 would also be engaged in trying to get off the seat or reaching  
16 beyond what they can because now it's like you're getting your  
17 feet tied down, but you're sitting down.

18 Q. Dr. Johnson said that if cashiers felt they needed to  
19 stand for whatever reason, they would just get off the stool  
20 and stand to perform a task. Do you agree with that  
21 assessment?

22 A. It could have been possible if there was ample space.  
23 There is no -- there is no space. The real estate is tight.  
24 The footprint, it's very small.

25 And for them to get off, first getting off, I hope that --

1 I'm not sure how this is going to be, because I cannot  
2 visualize somebody putting their feet between those five legs  
3 and then trying to move this around. This could be a trip  
4 hazard. It could be a bunch of things.

5 So I don't know how Dr. Johnson's visualizing that they  
6 could simply move it away.

7 Q. And do you say that because of the dimensions of the box,  
8 as you call it, in the check stand?

9 A. It's 27-by -- 27-by-35 is the -- is the dimensions of  
10 the -- dimension of the box, but the 27 would be the limiting  
11 factor.

12 Q. Do you believe there is any risk that the employee would  
13 try to accomplish some physical movement while remaining  
14 seated, as opposed to getting off the stool as ergonomically  
15 they really should to perform a task?

16 A. There's a possibility that they would because, one,  
17 it's -- employees might not perceive the risk. That is one.

18 And, two, there are times, like there are situations where  
19 we do know the risk, but we try to do it because it's the  
20 faster way to do it.

21 Q. Wouldn't training help avoid that with cashiers?

22 A. Training would help to a point, but my experience says  
23 that there is -- doesn't always help.

24 Q. In this trial we had several class members who testified  
25 that they thought that they could perform their job duties

1 while in a seated position. Do you have any view about that  
2 testimony?

3 **A.** I'm not quite sure they would be able to --

4 **MR. DOSTART:** Objection, your Honor. That's beyond  
5 his expert report as well.

6 **THE COURT:** Is that in the report?

7 **MR. WOHL:** They hadn't testified, so I guess it  
8 wasn't. But it's absolutely in the heart of the report, which  
9 is: Can they perform the duties of a cashier while seated?

10 And so they had their witnesses testify they could. And  
11 this is very consistent, I think, with whether, in fact, in his  
12 view they know what they are talking about.

13 **MR. DOSTART:** They had the opportunity to present  
14 witnesses who could have testified that they could and they did  
15 not.

16 **MR. WOHL:** That's irrelevant, your Honor. It has  
17 nothing to do with it.

18 **THE COURT:** It's not in the report. It's not allowed.  
19 At least as that -- as you've phrased the question, it's not in  
20 the report.

21 So sustained.

22 **MR. WOHL:** Your Honor, if you're going to hold me to  
23 that, then I'm not going to be able to ask these other  
24 questions. Okay.

25 **THE COURT:** Now, if -- I see it all the time. This

1 objection is sustained. The other side gets up and on  
2 cross-examination opens the door to many things. On redirect  
3 examination possibly this very question will be allowed.

4 I see this happen in 80 percent of the trials, because the  
5 cross-examiner can't help themselves. They just go at it and  
6 then they open all those doors because the cross-examination is  
7 not limited to what's in the report. The cross-examiner can  
8 open many, many, many doors, but once they are opened, the  
9 redirect examiner can take advantage of that, too.

10 So maybe you just have to wait your -- wait. Bide your  
11 time. I don't know. We'll have to see. But on direct  
12 examination you're stuck with what's in the report.

13 **MR. WOHL:** Thank you, your Honor. I understand.

14 **BY MR. WOHL:**

15 **Q.** Finally, Dr. Fernandez, are you familiar with a store  
16 called Aldi?

17 **A.** I heard Aldi and that's all I heard. I'm sorry.

18 **Q.** Have you ever been to an Aldi store?

19 **A.** I did not hear your question.

20 **Q.** Are you familiar with a store called Aldi?

21 **A.** Yes, I am.

22 **Q.** Okay. Have you ever been to an Aldi store?

23 **A.** Yes.

24 **Q.** And do you know if the cashiers at Aldi stores stand or  
25 sit while performing --

1           **MR. DOSTART:** Objection, your Honor. This is also not  
2 in either of the reports.

3           **MR. WOHL:** I don't think that's right, your Honor. I  
4 think that --

5           **THE COURT:** Show me where it is in the report.

6           **MR. WOHL:** All right. Give me some space, please.

7           Just so we're clear, Dr. Johnson testified about Aldi in  
8 the report and Dr. Fernandez responded.

9           **THE COURT:** Yes, but if it's in one of these reports,  
10 okay, you can do that.

11           **MR. WOHL:** Thank you.

12           (Discussion held off the record amongst defense counsel.)

13           **MR. WOHL:** Yes, Page 15, your Honor. This is  
14 Exhibit 214-17, Conclusion 8.

15           Dr. Johnson inappropriately compares the activities  
16 performed by CSAs in the Kmart store in Tulare, California to  
17 cashiers in Aldi and other European stores.

18           **THE COURT:** Is that true? Is that correct?

19           **MR. DOSTART:** I'm finding it right now, your Honor. I  
20 just want to confirm --

21           **THE COURT:** Why did you make the objection that it was  
22 not in the report without confirming it first?

23           **MR. DOSTART:** I honestly believed it was not in the  
24 report.

25           **THE COURT:** You're burning up counsel's time. That's

1 what's going on here.

2           **MR. DOSTART:** I apologize, your Honor. I apologize,  
3 counsel.

4           **THE COURT:** Take a look and see. Is it in the report?

5           **MR. DOSTART:** It is, your Honor. I apologize.

6 Objection withdrawn.

7           **THE COURT:** Objection is overruled. Go ahead.

8 **BY MR. WOHL:**

9 **Q.** Trying to remember where I left off, now.

10 Do you know whether Aldi cashiers sit or stand while  
11 performing their job duties?

12 **A.** They sit.

13 **Q.** And have you been to any stores in Europe observing  
14 cashiers performing their jobs?

15 **A.** Yes.

16 **Q.** What stores have those included?

17 **A.** In England I have been to Tesco and Tesco Express,  
18 Waitrose, which is a grocery store. ASDA, A-S-D-A, and a  
19 Wilkinson. I have been to other grocery stores as well.

20 **Q.** Did you observe cashiers in those European stores sitting  
21 while performing their job duties?

22 **A.** Sitting and standing.

23 **Q.** What stores did you observe cashiers standing in Europe?

24 **A.** The ones if I noticed standing were in the Tesco Express.  
25 That is, like -- it's a smaller version of a -- this huge



1 grocery chain. Where the -- it's not a dedicated cashier.  
2 They are at the cashier station and they also go ahead and --  
3 and they also perform other duties in that small store.

4 **Q.** With regard to Aldi and the other European small stores  
5 where you saw is the cashier sitting, did it appear to you that  
6 the operations were the same as Kmart's operations?

7 **A.** No.

8 **Q.** How were they different?

9 **A.** They bag -- they require -- they do not require --

10 **Q.** When you say "they," be clear what you mean?

11 **A.** Customer bags and the client -- the cashier does not bag  
12 the items that are scanned. The cashier does sit down and  
13 there is limited movement. They are basically enclosed in sort  
14 of a -- smaller console sort of a deal and the seat does have a  
15 back rest.

16 **MR. WOHL:** I think that's all I have. Thank you, Dr.  
17 Fernandez. I appreciate your time.

18 **THE COURT:** All right. Thank you.

19 Let's go to cross examination.

20 **MR. MATTHEW RIGHETTI:** Your Honor, will we have time  
21 to do closings today? I'm not sure what the Court's calendar  
22 is later in the afternoon.

23 **THE COURT:** We're going to stop at 1:00 o'clock.

24 **MR. MATTHEW RIGHETTI:** Okay.

25 **THE COURT:** We will not finish the closings, today.

1 Please proceed.

2 CROSS EXAMINATION

3 BY MR. DOSTART:

4 Q. Dr. Fernandez, you testified that this box (indicating) is  
5 27-by-35, is that correct?

6 A. That's right.

7 Q. And you said it was tight, is that correct?

8 A. Yes.

9 Q. Would you agree that the box is near the register?

10 A. The box is near the register?

11 Q. The area in this diagram, Slide 2B, 216-A, would you agree  
12 that the area, the box is near the cash register?

13 A. Yes.

14 Q. Okay. I want to talk to you about something that I think  
15 is very important.

16 You realize that you took an oath today, right?

17 A. Yes.

18 Q. To tell the truth?

19 A. Yes.

20 Q. At one point this morning the Court asked you a question.  
21 The Court asked you if during the 35 minutes -- excuse me.  
22 During the 25 minutes that a cashier is not doing a  
23 transaction, what were they doing?

24 Do you remember what you told the Court this morning?

25 MR. WOHL: Objection, your Honor. Misstates the

1 evidence. Misstates the testimony.

2           **THE COURT:** Well, I thought I did ask that question,  
3 but if I -- if you remember it differently, you may correct  
4 counsel.

5           But go ahead. Tell us again what your memory of that is.

6 **A.** I said they were not involved in a transaction.

7 **BY MR. DOSTART:**

8 **Q.** Did you tell the Court at any point this morning that the  
9 25 minutes out of the hour that they were not involved in a  
10 transaction, that they were walking around the store away from  
11 the register?

12 **A.** I said they were not involved -- I might have said that,  
13 yes.

14 **Q.** Okay. I think you did.

15           **THE COURT:** Well, do this. Just read it. Do you have  
16 the transcript?

17           **MR. DOSTART:** Let's read that actually.

18           **THE COURT:** Read the exact testimony and plus or minus  
19 to get it in context so that there won't be any question if  
20 this is important like you say. All right?

21           **MR. DOSTART:** Very important.

22           **THE COURT:** So let's -- who has the transcript?

23           **MR. DOSTART:** This is from earlier today, your Honor.

24           **THE COURT:** Well, then, the court reporter -- do you  
25 have the time, the minutes and the time that this testimony was

1 given? That might help the court reporter find it.

2 **MR. DOSTART:** I actually do not have the precise time.  
3 I know that the words "away" -- the word "away" was used or  
4 "walking around."

5 **THE COURT:** Well, the word "25" was used. So why  
6 don't we see if you can find it, Deb, using whatever. "25  
7 minutes" and "35 minutes" were in there.

8 You lawyers have to learn how to use this system so you  
9 can zero in on it.

10 (Brief pause.)

11 **THE COURT:** Let me read what I found and if it's not  
12 it, I'm sorry, but you lawyers need to use the system.

13 Mr. Wohl was asking the question:

14 **"QUESTION:** You said you told Judge Alsup that you  
15 looked at or you measured on an hourly basis 35  
16 minutes of transactions and 25 minutes which you  
17 described as being away from the counter?"

18 Then the answer was:

19 **"ANSWER:** 25 minutes of no transactions, which they  
20 were away from the counter or for a few seconds at  
21 the counter.

22 **"QUESTION:** So that's a very important clarification.  
23 So does the 25 minutes include any of the time that  
24 they are at the check stand, albeit not involved in a  
25 transaction?

1           **"ANSWER:** A minimum was zero and the maximum was 50.  
2           The average -- 50 seconds. The average was 15  
3           seconds."

4           All right. So I don't know if that's the part you were  
5 trying to remember, but that -- that was toward the end of that  
6 colloquy on that general subject.

7           **MR. DOSTART:** And just for clarity, that was after the  
8 break when Mr. Wohl then asked Dr. Fernandez to clarify some of  
9 his testimony before the previous break.

10          Before the break the Court had asked Dr. Fernandez what  
11 the associates were doing during that 25 minutes. If I  
12 recollect correctly, the answer was that they were walking  
13 around the store. They were not at the register.

14          But let me ask Dr. Fernandez.

15 **BY MR. DOSTART:**

16 **Q.** Dr. Fernandez, is it your testimony here today that the 25  
17 minutes, besides the 30 seconds or so --

18 **A.** Yes.

19 **Q.** (Continuing) -- when the cashiers are not actively  
20 involved in a transaction, is it your testimony here today that  
21 they are walking around the store?

22 **A.** They were not at the register.

23 **Q.** Let me ask that question again, Dr. Fernandez?

24 **A.** I don't know where they were.

25 **Q.** Let me ask the question again.

1 Is it your testimony that the 25 minutes in your study  
2 during which cashiers were not ringing up transactions, that  
3 they were walking around the store or not at the register?

4 **MR. WOHL:** Objection, your Honor. Vague and ambiguous  
5 the way he stated that.

6 **THE COURT:** Overruled. Please answer.

7 **A.** The -- they were not at the register. That's what I'm --  
8 what the -- what the evaluation shows.

9 **BY MR. DOSTART:**

10 **Q.** Were they within that 27-inch to 35-inch area that you've  
11 identified as the box?

12 **A.** They were not -- I cannot answer that. I'll tell you why,  
13 because --

14 **Q.** Dr. Fernandez --

15 **A.** No --

16 **MR. WOHL:** Objection, your Honor. He's interrupting  
17 the witness.

18 **THE COURT:** Let the witness finish.

19 **A.** What I was saying is the transaction time was 35.  
20 Twenty-five minutes there were no transactions.

21 **BY MR. DOSTART:**

22 **Q.** For those 25 minutes, Dr. Fernandez, were the cashiers  
23 within the box?

24 **A.** It's possible they were in the box for some period of  
25 time.

1 Q. Is it true, Dr. Fernandez, that out of the 60 minutes that  
2 you would analyze for your report, on average the cashiers were  
3 only outside the box for nine minutes or less?

4 A. I don't believe that's possible.

5 MR. DOSTART: Okay. I'm going to read now, your  
6 Honor, from the deposition of Jeffrey Fernandez taken on  
7 Tuesday -- excuse me, Thursday, October 4th, 2012 in this case.  
8 Page 30, Line 22.

9 MR. WOHL: Sorry, your Honor. Can you hold one  
10 second? We're getting the transcript.

11 THE COURT: You should already have that at the ready.  
12 Please proceed.

13 BY MR. DOSTART:

14 Q. From Page 30, Line 22, to Page 31, Line 8:

15 "QUESTION: Are you able to estimate for me what  
16 percentage of time that cashiers at the Tulare store  
17 spend working in the box as opposed to outside the  
18 box?

19 "ANSWER: The number of times they work inside the box  
20 and outside the box I've got out here.

21 "QUESTION: What I'm asking for is a percentage of  
22 time that cashiers spend inside the box as opposed to  
23 outside the box?

24 "ANSWER: That can be calculated, but I don't have  
25 that. Well, outside the box would be eight, eight

1 and a half, 8.8 minutes in an hour."

2 Do you stand by that testimony, Dr. Fernandez?

3 **A.** I -- 8, 8.5 minutes?

4 **Q.** 8.8, Dr. Fernandez.

5 **THE COURT:** Why don't you show him the testimony in  
6 his deposition -- so that he's -- he may not -- maybe he needs  
7 to hear it again or read it again before that registers.

8 **THE WITNESS:** I'm not quite sure what I said.

9 **THE COURT:** Counsel is going to show you what he just  
10 read.

11 (Brief pause.)

12 **BY MR. DOSTART:**

13 **Q.** So I'll ask the same question, Dr. Fernandez: Do you  
14 stand by that testimony?

15 **A.** I don't know --

16 **Q.** I'll show it to you again.

17 **A.** Please, I'm not sure what context I responded to that, but  
18 I would like to see it, please.

19 **THE COURT:** All right. Let the witness read the  
20 testimony.

21 You take the time that you need, but it sounds like in  
22 your deposition you said they were in the box all but 8.8  
23 minutes.

24 And then the question is whether or not we're  
25 understanding that correctly and whether or not you stand by



1 that prior testimony.

2 So you read it as carefully as you need to answer that  
3 question.

4 (Brief pause.)

5 **THE WITNESS:** I think I know what happened here.

6 **BY MR. DOSTART:**

7 **Q.** My next question, Dr. Fernandez, relates to --

8 **THE COURT:** He gets to answer the question.

9 **MR. DOSTART:** I'm sorry.

10 **THE COURT:** Do you stand by that testimony or not? If  
11 not, what's your explanation?

12 **THE WITNESS:** So the -- the number of instances CSA  
13 out of the box during transaction, that's another entry in  
14 Table 3. And these questions were -- at the deposition were  
15 being asked on Table 3. And it was 3.23. And number of  
16 instances out of the box between transactions, 5.58. I suspect  
17 what I did was I --

18 **BY MR. DOSTART:**

19 **Q.** 5.53?

20 **A.** Sorry.

21 **Q.** It's 5.53?

22 **A.** Yeah, 5.53.

23 I added those two up. That is the number of instances,  
24 not the percentage.

25 **Q.** You said "minutes" in your deposition?

1 **A.** I -- I was wrong. I said the number of instances per  
2 hour.

3 **THE COURT:** So in your deposition you said  
4 8-point-something minutes, correct?

5 **THE WITNESS:** Yes, sir.

6 **THE COURT:** But now you're selling us that it wasn't  
7 minutes, it was instances?

8 **THE WITNESS:** Yes. I'm basing it on what I'm seeing  
9 at the moment. And I -- I just added those two numbers up, and  
10 I -- I misspoke. I incorrectly said that.

11 **THE COURT:** All right. So he does not stand by his  
12 prior testimony.

13 **MR. DOSTART:** Okay.

14 **THE COURT:** All right. Next question.

15 **BY MR. DOSTART:**

16 **Q.** Okay. I will change topics.

17 Dr. Fernandez, you're the managing principle of JF  
18 Associates?

19 **A.** Yes.

20 **Q.** And JF Associates is an ergonomics consulting first?

21 **A.** It's on industrial engineering consulting firm.

22 **Q.** One of the functions of JF Associates is to provide expert  
23 witness testimony?

24 **A.** Yes, it is.

25 **Q.** You personally spend at least 50 percent of your time

1 doing expert witness work?

2 **A.** Yes. This year, yes.

3 **Q.** Of that time, up to 95 percent of the work that you do is  
4 on behalf of defendants as opposed to plaintiffs?

5 **A.** Ninety-five percent?

6 **MR. WOHL:** Is that a question, your Honor?

7 **MR. DOSTART:** It is.

8 **THE COURT:** It's not framed as a question. You need  
9 to say up to 95 percent of your work is on behalf of  
10 defendants; isn't that true? Or isn't it?

11 You do need to put a question in there. Sometimes the  
12 lawyers don't do it. But I think you -- I prefer that the  
13 lawyers make a question out of it.

14 So, please, answer that question. Is that 95 percent  
15 number correct or not?

16 **THE WITNESS:** It will be close to that. But I -- yes,  
17 it will be close to that.

18 **BY MR. DOSTART:**

19 **Q.** Is it true that you haven't done any expert witness work  
20 on behalf of a plaintiff since 2006?

21 **A.** That is incorrect.

22 **MR. DOSTART:** I'm now going to read from the  
23 deposition transcript, from the case *Kristin Hall versus*  
24 *Rite Aid*, taken on January 6, 2012, from page 19 lines 19  
25 through 24.

1           **THE COURT:** Please, go ahead.

2           **MR. DOSTART:** One second. I apologize. It is page  
3 50, line 7 through 16. Excuse me, line 4 through line 16.

4           **"QUESTION:** Dr. Fernandez, what was the last lawsuit  
5 in which you provided expert testimony on behalf of  
6 the employees?

7           **"ANSWER:** If you're asking me what was the last time I  
8 was deposed, or at trial? Is that the question, sir?

9           **"QUESTION:** What was the last lawsuit in which you  
10 provided expert testimony either in the form of a  
11 report or at a deposition or at trial on behalf of  
12 employees?

13           **"ANSWER:** Okay. 2005 or 2006. Or maybe later, yeah,  
14 in that time frame."

15 **BY MR. DOSTART:**

16 **Q.** My next question, Dr. Fernandez, is, has all of your work  
17 since 2006 been on behalf of employers?

18 **A.** No.

19 **Q.** Involving litigation consulting, has all of your work been  
20 on behalf of employers?

21 **A.** No.

22 **Q.** Have you testified as an expert on behalf of an employee  
23 since 2006?

24 **A.** Yes.

25 **Q.** What case was that?

1 A. This year, for Costco, against Costco.

2 Q. Okay. Any other cases?

3 A. I've been retained as an expert, but -- but I've not --  
4 the cases have -- two of them have settled. And I refer to it  
5 in my -- in the direct, the FELA cases, F-E-L-A, the railway  
6 cases, and in --

7 Q. So the only case in which you have provided testimony on  
8 behalf of an employee since 2006 is in a case involving Costco;  
9 is that correct?

10 A. Yes.

11 Q. Do you recall writing an article titled, "The Role of  
12 Physical Ergonomics in Litigation"?

13 A. Yes.

14 Q. In that article, do you recall discussing the role an  
15 ergonomist could play in giving expert testimony in a lawsuit?

16 A. In getting?

17 Q. In giving.

18 A. I don't remember the exact words, but I did write the  
19 article with some colleagues.

20 Q. Let me ask you, do you remember the article discussing the  
21 role an ergonomist could play in giving expert testimony in a  
22 lawsuit?

23 A. Yes. I have written about it. I am not suggesting I have  
24 not.

25 Q. Okay. Do you remember at one point in the article stating

1 that the role an ergonomist could play in a lawsuit is to help  
2 the defendant reduce the amount or the risk of a large damage  
3 award?

4 **A.** Did I use the word "defendant" there?

5 **Q.** I'm asking you.

6 **A.** I don't think I used the word "defendant" because my -- my  
7 coauthors on this, one of the major coauthors on this paper  
8 does not work for the defense.

9 **Q.** But you do?

10 **A.** I work -- most of my cases are, yes. His, most of his  
11 cases, no.

12 **Q.** So in this article you do remember that one point the  
13 article made is that an ergonomist can help the defendant  
14 reduce the risk of a large award or --

15 **THE COURT:** Just read it to us. If it's there, read  
16 where the word "defendant" occurs in that sentence. And so  
17 let's not be arguing over whether he did it or did not.

18 **MR. DOSTART:** I'm quoting from, "The Role of Physical  
19 Ergonomics in Litigation," by Jeffrey Fernandez. First page:

20 "The physical ergonomist can help mitigate the risk  
21 for large damages or settlements through improved  
22 design."

23 **BY MR. DOSTART:**

24 **Q.** Do you stand by that statement?

25 **A.** Yes, yes.

1 Q. Dr. Fernandez, you have been retained as an expert witness  
2 in four different seat cases, correct?

3 A. Yes.

4 Q. And in each of those cases you have worked on behalf of  
5 the defense, never the plaintiff?

6 A. Right.

7 Q. In this case, as of the date of your deposition on October  
8 4, 2012, you had billed to Kmart a total of \$135,000; is that  
9 correct?

10 A. That's right.

11 Q. That \$135,000 represented 15 to 20 percent of your firm's  
12 total billings in 2012, correct?

13 A. That's right.

14 Q. You have done additional work since your deposition in  
15 this case, correct?

16 A. That's right.

17 Q. What is the total amount that you have billed Kmart in  
18 this case?

19 A. About 225,000.

20 Q. And what percentage of your personal total billings does  
21 that represent in 2012?

22 A. My personal or the company's personal?

23 Q. Your personal billings.

24 A. I would have to guess because I have been involved in  
25 other cases, as well.

1 Q. Please give me your best estimate, Dr. Fernandez.

2 A. It would be in the 10 to 15 percent range.

3 Q. Apart from your expert witness work in the seat lawsuits,  
4 you have never been asked to design a workstation for a retail  
5 cashier; is that correct?

6 A. Yes.

7 Q. So that's a true statement?

8 A. That's correct.

9 Q. And apart from your expert witness work, you have no  
10 experience advising retail employers about whether cashiers  
11 should sit or stand?

12 A. That's right.

13 Q. Now, you do understand that plaintiff's expert,  
14 Dr. Johnson, has given that type of advice outside of the  
15 context of litigation?

16 A. That's what he says, yes.

17 Q. And so in this respect, Dr. Johnson has real world  
18 experience that you do not have; is that true?

19 A. Real world experience? It depends how you define that,  
20 sir.

21 Q. I'll define it as experience advising retail employers  
22 about whether cashiers should sit or stand.

23 A. You're asking me whether I have got real world experience  
24 consulting in the -- in this particular area? The answer is --  
25 and the answer is going to be no.



1 Q. You have known Dr. Johnson for 25 years, correct?

2 A. Yes.

3 Q. And he is a highly respected ergonomist?

4 A. He's respected, yes.

5 Q. His book entitled, "Work Design Industrial Ergonomics" is  
6 considered to be an authoritative textbook in the field of  
7 ergonomics; is that correct?

8 A. It's more used in the area of work design than ergonomics,  
9 but it is used in departments that have a time study and  
10 ergonomics. This one goes to time study in ergonomics.

11 Q. Would you agree that it's an authoritative textbook in its  
12 field?

13 A. It's one of the better textbooks, yes.

14 Q. Now I would like to talk to you about some general  
15 ergonomic principles.

16 A. Yes.

17 Q. First, what is NIOSH?

18 A. NIOSH is the National Institute for Occupational Safety  
19 and Health.

20 Q. And it's a federal agency?

21 A. Yes.

22 Q. And you've worked at NIOSH?

23 A. I worked my sabbatical at NIOSH, and I've consulted for  
24 NIOSH, yes.

25 Q. In 1992 to 1993?

1 A. I consulted -- I worked on a sabbatical in 1992-93.

2 Q. And when did you consult?

3 A. After that.

4 Q. And NIOSH issues guidelines about workplace design?

5 A. Yes.

6 Q. And NIOSH guidelines are considered authoritative in the  
7 field of ergonomics?

8 A. The guidelines and they -- they claim -- it's stated very  
9 explicitly, it's guidelines. It's authoritative, yes.

10 Q. Now, NIOSH recommends that when designing an employee  
11 workstation, employees should be given the option of sitting or  
12 standing, correct?

13 A. I don't know the exact terminology that they've used and  
14 what particular document you're referring to, but, in general,  
15 NIOSH would recommend something like that, yes.

16 Q. And, in fact, you agree and have testified that from an  
17 ergonomics perspective, it is best to give a cashier the option  
18 of sitting or standing, rather than requiring them to stand  
19 exclusively?

20 A. I believe in an ideal situation, yes, they should -- they  
21 should be given an option of sitting and standing. I have said  
22 that.

23 Q. And, in fact, you wrote a book on ergonomics called,  
24 "Applied Occupational Ergonomics," correct?

25 A. Yes.

1 Q. And in your book you specifically recommend that employees  
2 should be given the option of sitting or standing, correct?

3 A. They should be given an option of sitting or standing,  
4 provided it's --

5 Q. And you stand by that recommendation today?

6 A. I stand by that recommendation, yes.

7 Q. Now I want to talk with you a little bit about some  
8 adverse health consequences to prolonged standing.

9 A. Okay.

10 Q. You agree that there are negative health consequences  
11 associated with prolonged standing, right?

12 A. Yes.

13 Q. And one of those is varicose veins, correct?

14 A. Yes.

15 Q. What are varicose veins?

16 A. Basically, when your veins get distended over a period of  
17 time.

18 Q. And what happens?

19 A. What happens?

20 Q. Yes, when the veins get distended over a period of time,  
21 what is the result?

22 A. Are you asking for visually what happens?

23 Q. Yes, visually.

24 A. Visually, basically, they distend and you can see them in  
25 your lower legs, in your lower extremities.

1 Q. And there are published studies in ergonomics literature  
2 that say that prolonged standing leads to varicose veins,  
3 correct?

4 A. There are studies that are done, yes.

5 Q. And you agree with those studies, correct?

6 A. I do agree with those studies.

7 Q. And isn't it true that varicose veins can lead to  
8 hospitalization if they're serious enough?

9 A. In some cases, yes.

10 Q. And there's another adverse health effect associated with  
11 prolonged standing called edema; is that true?

12 A. That's right.

13 Q. What is edema, Dr. Fernandez?

14 A. Fluid retention.

15 Q. Where?

16 A. Edema is fluid retention in any part of the body.

17 Q. And where would edema affect an individual who is  
18 suffering from edema as a result of prolonged standing?

19 A. In the lower extremities, or could be other parts or other  
20 extremities.

21 Q. And edema has the potential to be become very serious, as  
22 well; is that correct?

23 A. I am not personally aware of it, but I'm sure in the  
24 literature it states that that could become in advance cases,  
25 yes.

1 Q. You would agree that prolonged standing also leads to  
2 fatigue in the legs and feet, correct?

3 A. Yes.

4 Q. And, in fact, in your book you state that fatigue starts  
5 to set in after only 30 minutes of standing. Is that true,  
6 Doctor?

7 A. Yes.

8 Q. And another symptom of prolonged standing is foot and leg  
9 pain. Is that true, Doctor?

10 A. Foot and leg pain, yep. Yeah, that --

11 Q. Would you agree -- I'm sorry?

12 A. Yes, that does occur.

13 Q. And would you agree that prolonged standing can also lead  
14 to nocturnal leg cramps?

15 A. I'm not familiar with that research.

16 MR. DOSTART: I'm going to read from the deposition of  
17 Jeffrey Fernandez, taken on Friday, January 6, 2012, in the  
18 case -- *Kristin Hall versus Rite Aid Corporation*. It is page  
19 345, line 17, to page 346, line 11.

20 "QUESTION: Well, we can cut through it if you can  
21 tell me the research. So what adverse health  
22 consequences are you aware of that result from  
23 prolonged standing?

24 "ANSWER: Prolonged standing is one -- is not moving  
25 at all, is venous blood pooling. There's varicose

1           veins, static, the static loading of the lower  
2           extremities.

3           **"QUESTION:**   Edema?

4           **"ANSWER:**   Not in -- in -- in some individuals, yes.

5           **"QUESTION:**   Nocturnal leg cramps?

6           **"ANSWER:**   It -- it might be.   It's -- I'm not -- I've  
7           not read this.   This is not -- it's like reading  
8           the -- the fine print in a presc- -- in -- in -- in a  
9           prescription drug.   These are the common things.  
10          And -- and this is what also happens, the minor  
11          effects.   And all this -- this is not as common.  
12          Occasional.   And, yes, it is documented.   Yes."

13       **BY MR. DOSTART:**

14       **Q.**   Do you stand by that testimony, Dr. Fernandez?

15       **A.**   I stand by it.   I said it, yes.

16       **Q.**   Haven't there been studies in the ergonomics literature,  
17       Dr. Fernandez, that show that prolonged standing can lead to  
18       atherosclerosis?

19       **A.**   There have been literature, yes.

20       **Q.**   And atherosclerosis is the hardening of the arteries; is  
21       that correct?

22       **A.**   Yes.

23       **Q.**   And that is serious, Doctor; isn't it?

24       **A.**   Depends on the duration, the duration of standing.   It  
25       depends on the duration of how long the person is standing

1 over, how many years. But there is literature that says that.

2 Q. That wasn't my question, Dr. Fernandez. My question was,  
3 is atherosclerosis serious?

4 A. Yes.

5 Q. Are you familiar with an article by Dr. Ryan, called  
6 "Musculoskeletal Symptoms in Supermarket Workers"?

7 A. Yes.

8 Q. It appeared in *Ergonomics*, which is a leading  
9 peer-reviewed journal in your field, correct?

10 A. Yes.

11 Q. And Dr. Ryan found that grocery store cashiers had  
12 increased foot and leg pain because of prolonged standing at  
13 the register; isn't that correct?

14 A. That's right.

15 Q. And because of that finding, Dr. Ryan recommended that  
16 cashiers be given the option of sitting or standing at their  
17 discretion, correct?

18 A. That's based on his results. That's what he recommends,  
19 yes.

20 Q. And you understand that Dr. Johnson is recommending that  
21 cashiers be allowed to alternate between sitting and standing,  
22 correct?

23 A. That's right.

24 Q. And when employees alternate between sitting and standing,  
25 they don't suffer the same negative health effects as if

1 they're required to stand all day or as if they're required to  
2 sit all day; isn't that true?

3 **A.** In an ideal situation, yes.

4 **Q.** And, in fact, you are recommending that cashiers be  
5 required to stand at the register; isn't that correct?

6 **A.** I'm -- I am suggesting that based on the task demands,  
7 based on the tasks that have been performed, that if they are  
8 required to sit, their risk is going to increase.

9 **Q.** But you understand that Dr. Johnson is not suggesting they  
10 be required to sit. You just testified that you understand  
11 Dr. Johnson is advising them to be able to sit and stand. Is  
12 that correct?

13 **A.** I agree. But while --

14 **Q.** Dr. Fernandez --

15 **MR. WOHL:** Let him finish his response, your Honor.

16 **THE COURT:** Had you finished your answer?

17 **THE WITNESS:** No, sir.

18 **THE COURT:** Please, continue.

19 **THE WITNESS:** But when -- when they want -- when they  
20 need to get up, they need to have the space to get up. They  
21 need to be able to move. The task demands does not allow them  
22 to stand up when they -- when there's heavier weights.

23 **BY MR. DOSTART:**

24 **Q.** Okay. Let's talk about your work at the Tulare store in  
25 this case.



1 Dr. Fernandez, part of your assignment was to observe  
2 Tulare cashiers and determine what they actually do, correct?

3 A. Yes.

4 Q. And you did it by observing them live, and then by  
5 videotaping them; is that correct?

6 A. Yes.

7 Q. You recorded 300 hours of videotape, correct?

8 A. Yes.

9 Q. Please turn to Table 2 of your September 6, 2012 report.

10 A. Yes.

11 Q. This table contains a list of the tasks that cashiers at  
12 the Tulare store perform, correct?

13 A. Yes.

14 THE COURT: Does somebody have a copy I can look at?

15 THE WITNESS: Yes.

16 THE COURT: You need your copy.

17 MR. DOSTART: I may have one, Your Honor.

18 THE COURT: Counsel will give me one. All right.

19 Give it to the clerk. The clerk will hand it to me. All  
20 right. Go ahead.

21 BY MR. DOSTART:

22 Q. Dr. Fernandez, do you believe that this is a complete and  
23 accurate list of the tasks performed by the Tulare front end  
24 cashiers?

25 A. This is the list that I developed with counsel. And as

1 far as I'm aware, this is an accurate list.

2 Q. Okay. Let's go through each task. First, "Making eye  
3 contact, smiling, greeting, and offering to help every  
4 customer." Now I want to go through that one by one.

5 Dr. Fernandez, do you agree that making eye contact could  
6 be done from a seated position?

7 A. From an ergonomics perspective, yes.

8 Q. Dr. Fernandez, do you agree that smiling could be done  
9 from a seated position?

10 A. Yes.

11 Q. Do you agree that greeting could be done from a seated  
12 position?

13 A. Yes.

14 Q. Do you agree that offering to help every customer could be  
15 done from a seated position?

16 A. Yes.

17 Q. Next, "Scanning items."

18 Now, Dr. Fernandez, if Kmart modified the workstation, do  
19 you agree that this is a task that could be done in a seated  
20 position?

21 A. If you tell me, sir, what that modification is.

22 Q. I'm asking you, simply, if they modified it in a way that  
23 was ergonomic -- that they just made modifications, could  
24 scanning be done in a seated position?

25 MR. WOHL: Objection. Incomplete hypothetical, your

1 Honor.

2           **THE COURT:** This particular case, I think it's okay.  
3 Overruled. Please, answer the question.

4           **THE WITNESS:** It could be done --

5 **BY MR. DOSTART:**

6 **Q.** Okay.

7 **A.** -- but --

8           **MR. WOHL:** Your Honor, can he finish?

9           **THE COURT:** Go ahead, finish your answer, please.

10           **THE WITNESS:** But while scanning, the risk is going to  
11 increase for the upper extremities.

12 **BY MR. DOSTART:**

13 **Q.** Okay. Now, Dr. Fernandez, you haven't considered any  
14 modifications to the workstation at Tulare, correct?

15 **A.** No, I have not.

16 **Q.** And that was beyond the scope of your assignment in this  
17 case, correct?

18 **A.** Right.

19 **Q.** Okay. Next item, "Bagging items."

20 Dr. Fernandez, you agree that it is possible to bag items  
21 that weigh less than 10 pounds, from a seated posture, correct?

22 **A.** It depends. There are some items that one could bag less  
23 than 10 pounds, and other items no.

24 **Q.** And you agree that accepting payments could be done from a  
25 seated position, correct?

1   **A.**    Accepting payments, yes.

2   **Q.**    You agree that issuing receipts could be done from a  
3   seated position, correct?

4   **A.**    It depends if it was redesigned.

5           Now, let me ask you this to clarify. I shouldn't be  
6   asking the question. Are you asking me these questions with  
7   the new design?

8   **Q.**    Let's talk about, "Issue receipts with a redesigned  
9   workstation." Could a cashier issue a receipt from a seated  
10   position?

11   **A.**    If it's redesigned and it's within their reach?

12   **Q.**    Yes.

13   **A.**    It could be done.

14   **Q.**    Could a -- and, now, "Processing returns" is the next  
15   item. And this consists of two activities. One is the  
16   physical processing of the return at the register. The other  
17   is processing the return in terms of taking the item back to  
18   the store floor.

19           In terms of the processing the item for return at the  
20   register, could that be done from a seated position?

21           **MR. WOHL:** Objection, Your Honor. Lacks foundation.  
22   Counsel is testifying right there.

23           **THE COURT:** Well, that's overruled. But it needs to  
24   be -- you did not make clear that as to whether or not you're  
25   talking about with the existing configuration or with a -- you

1 know, ideally-modified situation.

2 **BY MR. DOSTART:**

3 **Q.** Let me ask --

4 **THE COURT:** So you need to make that clear.

5 **BY MR. DOSTART:**

6 **Q.** Okay. Dr. Fernandez, in the existing configuration --  
7 strike that.

8 Dr. Fernandez, with a modified workstation, do you agree  
9 that the portion of processing a return that occurs at the cash  
10 register could be done from a seated position?

11 **MR. WOHL:** Objection. Vague and ambiguous, your  
12 Honor.

13 **THE COURT:** Overruled. Please answer.

14 **THE WITNESS:** If -- if the -- if it's redesigned, yes.

15 **BY MR. DOSTART:**

16 **Q.** Okay. The next item on the list is, "Monitor shrink."  
17 This means keeping your eyes open for theft.

18 Do you believe, Dr. Fernandez, that monitoring shrink  
19 could be done from a seated position?

20 **MR. WOHL:** Objection, Your Honor. Counsel testifying  
21 again. Lacks foundation.

22 **THE COURT:** Well, overruled. Please answer.

23 **THE WITNESS:** Monitoring shrink is from -- it depends  
24 what the -- what is required by the company.

25 If they are asking the -- the CSAs to look -- to look at

1 the hands or in the cart, I suspect it could be done in the  
2 seating -- seated position.

3 But, if you're asking the CSA to look under the cart, it's  
4 not -- it's going to be very difficult doing it in a seated  
5 position because of the field of view. You have a better field  
6 of view standing up.

7 **BY MR. DOSTART:**

8 **Q.** Are you aware of any companies that have placed a mirror  
9 on the checkstand opposing a cashier so that the cashier could  
10 look at the mirror to see the bottom of the cart of the  
11 customer that they are checking out?

12 **A.** I've seen mirrors. I'm not sure of the efficiency. You  
13 asked me a question. I'm answering you which part I suspect  
14 from an ergonomics perspective.

15 **Q.** But you've seen it?

16 **A.** I have seen it, yes.

17 **Q.** Okay. The next item on the list is, "Assist with customer  
18 satisfaction survey."

19 Dr. Fernandez, do you believe that a cashier at Kmart,  
20 with a modified workstation, could assist the customer with a  
21 satisfaction survey?

22 **A.** If it's within reach and they could perform it, yes.

23 **Q.** Okay. Do you agree -- the next item on the list,  
24 "Maintain a clean work area."

25 Do you agree that a portion of maintaining a clean work

1 area could be done from a seated position?

2 **A.** Sir, could you explain to me what you mean by "portion."

3 **Q.** I'm asking you if any portion of maintaining a clean work  
4 area could be done from a seated position?

5 **A.** Portion where, basically, it's within their reach could be  
6 done.

7 **Q.** Okay. The next is, "Maintain register station by  
8 replenishing supplies."

9 Dr. Fernandez, do you believe that a cashier would have to  
10 stand to replenish supplies?

11 **A.** Yes.

12 **Q.** Do you have any estimate for how often that occurs?

13 **A.** No.

14 **Q.** And the same is true with respect to the next two tasks,  
15 Dr. Fernandez, isn't it, "Carry out items if required," and,  
16 "Load heavy items into vehicle"?

17 **MR. WOHL:** I'm sorry, vague and ambiguous. What was  
18 the question?

19 **BY MR. DOSTART:**

20 **Q.** Dr. Fernandez, do you have any estimate for how often  
21 cashiers at Tulare carry out items, if required, or load heavy  
22 items into vehicle?

23 **A.** No.

24 **Q.** The next item, "Resolve customer issues and complaints."

25 Do you agree, Dr. Fernandez, that depending on the type of

1 issue, some customer complaints and issues can be handled from  
2 a seated position?

3 **A.** I -- I did not -- I don't know.

4 **Q.** You don't know? Your answer today is that you don't know  
5 whether that could be done from a seated position, a portion of  
6 the task?

7 **A.** I don't know what -- what -- what it involved. I suspect  
8 some of it could be done. Some of it could not be. Will not  
9 be.

10 **MR. DOSTART:** I'm going to read from the deposition of  
11 Jeffrey Fernandez, taken on Thursday, October 4, in this case,  
12 from page 37, line 13 to line 25.

13 **"QUESTION:** The next item is, 'Resolve customer issues  
14 and complaints.' What does that consist of?

15 **"ANSWER:** Individuals come to the counter, and they've  
16 got a complaint regarding a particular bill or a  
17 particular person. So, basically, discussions --  
18 sometimes discussions regarding an invoice, statement  
19 out there, or receipt.

20 **"QUESTION:** And that activity could be performed from  
21 a seated position, correct?

22 "Objection. Overbroad. Incomplete hypothetical.

23 **"ANSWER:** It could be performed, provided they're not  
24 bringing back some items."

25 **MR. WOHL:** Could he finish the response, your Honor,



1 at the top of page 38?

2 **THE COURT:** Is there more to the answer?

3 **MR. DOSTART:** It appears there is. I apologize.

4 **THE COURT:** Please read the entire answer.

5 **MR. DOSTART:** (Reading)

6 "They're not bringing back some items, items being  
7 heavy and so on. But if it's a question of just a  
8 receipt, it could be performed sitting down."

9 **BY MR. DOSTART:**

10 **Q.** Do you stand by that language, Dr. Fernandez?

11 **A.** Yes. Yes.

12 **Q.** Next is, "Monitor sales circular."

13 Do you believe that cashiers can monitor a sales circular  
14 from a seated posture?

15 **A.** If they have it in their hands --

16 **Q.** What does, "Monitor sales circular" mean, Dr. Fernandez?

17 **A.** Review the sales -- sales bulletin and, basically, keep  
18 track of what's happening. And if rain checks need to be  
19 issued, give them -- give the customer rain checks.

20 **Q.** And so you would agree that monitor sales circular could  
21 be done from a seated posture?

22 **A.** I said yes.

23 **Q.** Next is, "Assisting and training fellow associates."

24 Dr. Fernandez, do you have any estimate of how much time  
25 is spent on this task?

1 A. No.

2 Q. Do you believe it could be done from a seated position?

3 A. Some of it could be. And then some of it has to be done  
4 in a standing position.

5 Q. Okay. Next, I want to talk a little bit about items that  
6 weigh more than ten pounds at the Tulare store.

7 A. Okay.

8 Q. You do believe that when a cashier handles an item that  
9 weighs more than ten pounds, they should stand up, correct?

10 A. Yes.

11 Q. Now, however, you agree that there are some  
12 recommendations in the ergonomics literature that say that the  
13 cutoff while lifting an item while seated is 20 pounds, not  
14 ten, correct?

15 A. I've seen very few that say that, but there -- I -- I -- I  
16 came across one some years ago. But there are some that says  
17 20.

18 Q. Okay. Now I would like to turn back to your September 6,  
19 2012, report, to Table 3. Would you mind opening that up.

20 A. Sure. Yes, sir.

21 Q. Okay. If you go down to the row four from the bottom --

22 A. Yes.

23 Q. -- I'm going to read it. And it says, "Number of heavy  
24 items present"?

25 A. Yes.

1 Q. And this is per hour, correct?

2 A. Yes.

3 Q. Okay. The mean, the average, is 3.47; is that correct?

4 A. Yes.

5 Q. So that means that there are 3.47 heavy items present per  
6 hour, on average; is that correct?

7 A. That's right.

8 Q. And a heavy item is an item that weighs more than ten  
9 pounds, correct?

10 A. That's right.

11 Q. Okay. So is it true that that is approximately once every  
12 17 minutes, that a heavy item is present? If you need a  
13 calculator, I can get it for you. Would you like me to hand  
14 you a calculator?

15 A. Please.

16 Q. Okay. Just for the record, I believe the math is 60  
17 divided by 3.47. I believe, the result is -- Dr. Fernandez?

18 A. 5.7.

19 Q. Well, let me ask you, what math are you doing,  
20 Dr. Fernandez? I don't have the degree in engineering.

21 A. 3.47.

22 Q. No, I believe that would be the denominator. I think the  
23 numerator would be 60. I think that, according to your  
24 chart -- I don't know; you're the expert -- is the number of  
25 times or the number of instances per hour.

1 A. So 3.47 instances in 60 minutes.

2 Q. Correct. So if you were to figure out how often per hour  
3 it were to occur, how would you do that math, Dr. Fernandez?

4 MR. WOHL: I'm sorry. Separate from what he already  
5 said, your Honor? I don't understand what the question is.

6 THE WITNESS: I was confused, but give me a minute.

7 THE COURT: I think he is trying to get at, what is  
8 the mean time between instances of lifting something heavy --

9 MR. DOSTART: That's correct.

10 THE COURT: -- if there are 3.47 per hour?

11 THE WITNESS: So, okay. Sixty divide by -- one every  
12 17 minutes.

13 BY MR. DOSTART:

14 Q. So there's an item that weighs more than ten pounds  
15 present at the Tulare workstation approximately once every 17  
16 minutes, according to your report, Dr. Fernandez?

17 A. That's right.

18 Q. Now, if you go down to the penultimate row or the row  
19 second from the bottom, "Number of instances of heavy items  
20 lifted." Do you see that row, Dr. Fernandez?

21 A. Yes.

22 Q. Okay. That row states that the number of instances of  
23 heavy items lifted is 6.07 mean per hour; is that correct,  
24 Dr. Fernandez?

25 A. Yes.

1 Q. Is it true that the average time, then, in between a heavy  
2 item lifted at the Tulare store, is approximately ten minutes,  
3 60 divided by 6?

4 A. Average time between? Ten minutes. Ten minutes, yes.

5 Q. That's correct?

6 A. Yep.

7 THE COURT: Can I ask a question. We just got  
8 through, it says, "Number of heavy items present, 3.47."

9 THE WITNESS: Yes, sir.

10 THE COURT: But then we have number of instances of  
11 heavy items lifted.

12 THE WITNESS: It's higher.

13 THE COURT: How could it be higher? If you've only  
14 got 3.47, how can you have 6.07 instances?

15 THE WITNESS: That was -- that is confusing, sir.  
16 When you put these small items together in a bag, they do  
17 become heavy. They do -- they do get above ten pounds.

18 And we've seen that happen in the videos. They put it in  
19 a bag, and then it's more than ten pounds, and they're moving  
20 that bag.

21 THE COURT: So you've got two 5-pound items go into  
22 one bag. That counts as an instance of heavy item lifted?

23 THE WITNESS: Yes, sir.

24 THE COURT: Okay. All right. I got it. Thank you.  
25

1 **BY MR. DOSTART:**

2 **Q.** So just to be clear, then, I had the exact same question  
3 that the Court had. It's actually not an item. Or, I should  
4 say, it's actually not an item of merchandise. It could be a  
5 compendium or the aggregate of a bunch of items of merchandise?

6 **A.** Yes.

7 **Q.** Okay. Are you aware that Dr. Johnson's modification in  
8 regards to bagging would alleviate the need for the cashier to  
9 bend down, pick up and otherwise rotate with a bag?

10 **MR. WOHL:** Objection. Lacks foundation. He hasn't  
11 explained the modification by Dr. Johnson.

12 **THE COURT:** Sustained. I agree with that objection.  
13 You need to rephrase that.

14 **MR. DOSTART:** That's okay. I'll move on.

15 **BY MR. DOSTART:**

16 **Q.** Dr. Fernandez, you also believe that a cashier should  
17 stand in order to push or pull an item more than ten pounds; is  
18 that correct?

19 **A.** That's right.

20 **Q.** And, according to Table 3, this happens only 1.67 times  
21 per hour, or less than once every 30 minutes; is that correct?

22 **A.** Yes.

23 **Q.** Finally, you believe that a cashier should stand to rotate  
24 an item weighing more than ten pounds; is that correct?

25 **A.** Yes.

1 Q. However, this happens 0.37 times per hour, or less than  
2 once every 60 minutes; is that correct?

3 A. That's incorrect. So the number was .73.

4 Q. I'm sorry, what did I say?

5 THE COURT: It says ".73" on my copy.

6 BY MR. DOSTART:

7 Q. That's right.

8 THE COURT: Is that a typo?

9 THE WITNESS: He said ".37," sir. Counsel said ".37"  
10 incorrectly.

11 THE COURT: All right. But it's .73?

12 THE WITNESS: Yes.

13 THE COURT: It's still going to be less than once an  
14 hour.

15 THE WITNESS: Yes, sir.

16 THE COURT: Okay.

17 BY MR. DOSTART:

18 Q. Thank you, Dr. Fernandez.

19 Dr. Fernandez, I'll take you away from Table 3 right now.  
20 I'd like to ask you this:

21 Based on what you know about the tasks that Tulare  
22 cashiers perform, you agree that it is possible to design a  
23 front end workstation at Tulare that would allow cashiers to  
24 alternate between sitting and standing?

25 A. In an ideal situation, I've said this, in an ideal

1 situation, it is possible. It is possible to design something  
2 like that. But the reality of an ergonomist is, you've got to  
3 take into consideration a number of variables.

4 Q. But it could be done?

5 A. Hypothetically, ideally, yes, it could be done.

6 Q. And this is exactly --

7 THE COURT: Can we do this? I'd like for the witness  
8 to explain what that -- what that design would look like at the  
9 Tulare store.

10 Okay. Can you tell us what -- what it would look like.  
11 You just said it could be done, so you must have something in  
12 mind.

13 THE WITNESS: I don't know what the cost is going to  
14 be. I do know that for something like this, one would have to  
15 change the model of not bagging. So one -- the CSAs would  
16 not -- the bagging is going to be a problem. Just because one  
17 says you should stand up and bag, does not necessarily mean the  
18 CSAs will stand up and bag. They might sit down and bag, and  
19 that's going to increase the risk.

20 They would need, I would suspect, conveyor belts. So that  
21 would mean an increased space limitation. They would need, I  
22 would suspect, complete new counters and scanners and  
23 registers.

24 THE COURT: How would the seat be arranged so that you  
25 would eliminate safety problems?



1           **THE WITNESS:** It would not be -- it would be -- I  
2 doubt it's ever going to be a sit/stand as Dr. Johnson  
3 suggests.

4           **THE COURT:** The thing you just described earlier,  
5 where they kind of leaned on it, you called it a butt rest.

6           **THE WITNESS:** Yes, sir.

7           **THE COURT:** How would that work if you had a butt rest  
8 here? How could that possibly fit into the design?

9           **THE WITNESS:** So butt rest, the stability problems  
10 with the butt rest. Typically, what you do is you bolt it  
11 down. But if you had something like that there, what you'd  
12 have to do is then you would have to -- if you had to get up,  
13 it would cause problems.

14           **THE COURT:** Why?

15           **THE WITNESS:** It would get in your way. You won't be  
16 able to move it.

17           **THE COURT:** Well, okay. But your feet would still be  
18 on the floor, right?

19           **THE WITNESS:** The feet would be on the floor.

20           **THE COURT:** So you would take some of the weight off  
21 your legs, if you were able to lean back in that manner,  
22 correct?

23           **THE WITNESS:** Yes, it would be able to take some  
24 weight off, yes, sir.

25           **THE COURT:** So to solve the space problem, you would

1 need a bigger footprint.

2           **THE WITNESS:** You would need a bigger footprint, yes,  
3 sir.

4           **THE COURT:** All right. So, okay. So, bigger  
5 footprint. But it could be done?

6           **THE WITNESS:** Yes, sir, it could be done.

7           I don't know what other constraints, how this all -- how,  
8 you know, the dimensions, and so on, how it would -- how it  
9 would all measure and what --

10           **THE COURT:** So, in that scenario, just to -- just to  
11 address something you've mentioned a moment ago, let's say that  
12 the employer still wanted them to stand up to bag the stuff.  
13 Then at the end of the transaction, the cashier could stand up  
14 and go to wherever the bags are, and put the stuff in the bags.  
15 But, in the meantime, they might have swiped the individual  
16 items over the scanner while seated on the butt stand.

17           Is that it, butt rest, butt stand? Whatever it is. I  
18 hate to use these kind of gross words in a public proceeding  
19 like this, but that's the term you said is appropriate.

20           That could be done that way, right? The scanning part  
21 could be done while seated, unless it was a heavy item.

22           **THE WITNESS:** That's right, sir.

23           And the concern there is, of course, would there be enough  
24 space in that area where they're scanning to get off the seat  
25 and stand up?

1       Because this -- this high sit/stand stool -- I prefer  
2       using that word here. The sit/stand stool, the high one --

3               **THE COURT:** Uh-huh.

4               **THE WITNESS:** -- you could not move it around. You  
5       would not be able to move it because --

6               **THE COURT:** It would have to be a big enough footprint  
7       to allow safely -- for the employee to walk around it.

8               **THE WITNESS:** Sir, what would happen is, if you want  
9       the employee to be close to the scanner, you would go ahead and  
10      put that -- you would go ahead and bolt it close to the  
11      scanner.

12              **THE COURT:** Right.

13              **THE WITNESS:** Now, if the employee has to stand up, if  
14      the employee had to stand up or it was beyond their reach, they  
15      would not have the space.

16              It's like my chair here, and I'm going to get -- I can't  
17      move the chair back, and it's here (indicating), and I've got  
18      to go ahead and reach out, reach out, it does -- it does pose  
19      problems.

20              It would have been nice and better if you could move it  
21      around. But that -- that stability is a problem on those high  
22      stools.

23              **THE COURT:** All right. Go ahead, Counsel.

24      **BY MR. DOSTART:**

25      **Q.** So taking a step back, Dr. Fernandez, I just want to be

1 clear, you agree that the ideal ergonomic solution would be to  
2 offer a cashier a possibility of change between sitting and  
3 standing positions, correct?

4 **A.** I said that many times, sir, yes, right.

5 **Q.** And this is exactly what Dr. Johnson recommends, correct?

6 **MR. WOHL:** Objection. Misstates his testimony.

7 **THE COURT:** I'm sorry, did -- you used the word  
8 "cashier." I want to make sure the witness understands the  
9 word "cashier" is in that question.

10 **MR. DOSTART:** I'll ask it again, just to be clear.

11 **THE COURT:** All right.

12 **BY MR. DOSTART:**

13 **Q.** Dr. Fernandez, you agree that the ideal ergonomic solution  
14 would be to offer the cashier a possibility of changing between  
15 sitting and standing positions, correct?

16 **A.** In an ideal situation, as ergonomists, we ergonomists  
17 would recommend that, and so would I.

18 **Q.** Thank you.

19 And you agree that that is what Dr. Fernandez --

20 **A.** I'm Dr. Fernandez.

21 **Q.** That -- that Dr. Johnson recommends, correct?

22 **MR. WOHL:** Objection. Vague and ambiguous. Is he  
23 saying Dr. Johnson --

24 **THE COURT:** I don't remember Dr. Johnson's specific  
25 design, though. Did Dr. Johnson do a layout for me, a

1 blueprint?

2           **MR. DOSTART:** I don't believe he did a true blueprint,  
3 your Honor. I think he just said it could be done like  
4 Dr. Fernandez --

5           **THE COURT:** But no one has done it for me yet. That's  
6 one of the things I would come to later. I would like to see  
7 this ideal design, to see how much of a footprint it takes up  
8 and whether it's reasonable to require the employer to do it.

9           All right. Okay. I'm going to sustain the objection.  
10 That -- the -- it presupposes that he, Johnson, actually  
11 submitted a design. In theory, that's what he said. That's  
12 true.

13           **MR. DOSTART:** Understood, your Honor.

14 **BY MR. DOSTART:**

15 **Q.** Dr. Fernandez, you would agree that Dr. Johnson recommends  
16 a sit/stand option, correct?

17 **A.** Sitting or standing option.

18 **Q.** Correct?

19 **A.** Yes.

20 **Q.** And you agree that this was what Dr. Ryan recommends in  
21 his article in the publication *Ergonomics*, correct?

22 **A.** Dr. Ryan recommends it based on his -- on his study based  
23 on the criteria and based on the limitations that he has on the  
24 design that he has in the grocery stores that he looked at in  
25 Australia.

1 Q. And you're aware of grocery stores in other countries that  
2 provide a seated cashier, correct?

3 A. There are grocery stores in other countries in Europe that  
4 do provide a seated cashier, yes.

5 Q. And you're aware that the NIOSH guidelines recommend that  
6 cashiers be given the option to sit or stand, correct?

7 A. Cashiers or --

8 Q. Correct?

9 A. -- or just workers in general?

10 Q. Do you understand that NIOSH recommends that employees be  
11 given the option to sit or stand, in general?

12 THE COURT: Why don't you read it, if there is such a  
13 thing. And there is a difference between cashier and employee.  
14 So whatever is in there, make sure you read it correctly.

15 MR. DOSTART: I will, Your Honor.

16 Let me read from a document which I will hand to  
17 Dr. Fernandez, entitled, "Elements of Ergonomic Programs."

18 THE COURT: We're going to break in five minutes, so  
19 keep the clock in mind, please.

20 MR. DOSTART: I will, Your Honor. The top left of the  
21 document is the NIOSH stamp, which is the National Institute  
22 for Occupational Safety and Health.

23 The bottom is the stamp of the United States Department of  
24 Health and Human Services, the Public Health Service. The  
25 bottom right is the Center for Disease Control and Prevention.

1 And the column on the right states:

2 "A Primer Based on Workplace Evaluations of  
3 Musculoskeletal Disorders."

4 **BY MR. DOSTART:**

5 **Q.** If you turn to what is page 125 of this document, which is  
6 titled, "Tray 9A, General Workstation Design Principles." If  
7 you go all the way down to number 6, it states that:

8 "One of the general workstation design principles is  
9 to allow workers, at their discretion, to alternate  
10 between sitting and standing."

11 Do you see that sentence, Dr. Fernandez?

12 **A.** Yes, I do. It's basically workers here, not cashiers.

13 **Q.** I understand, Dr. Fernandez.

14 **MR. WOHL:** I'm sorry, your Honor. I think he's trying  
15 to finish his answer, and Mr. Dostart keeps cutting him off.  
16 That's not fair.

17 **THE COURT:** Did you finish your answer?

18 **THE WITNESS:** No, I didn't, sir.

19 **THE COURT:** Please, continue with your answer.

20 **THE WITNESS:** In that same statement it says, "Provide  
21 foot mats or padded surfaces for prolonged standing."

22 **BY MR. DOSTART:**

23 **Q.** Okay. And would you agree, Dr. Fernandez, that the  
24 recommendation to provide a sit/stand option is, in fact,  
25 consistent with what you recommend on page 144 of your own

1 book?

2 **A.** I -- sir, may I clarify something? When you say  
3 sit/stand, you say sitting or standing; am I correct?

4 What many of us in ergonomics call sit/stand, we call the  
5 sit/stand stool. So I need a clarification from you, sir,  
6 please. What are you referring to?

7 **Q.** Your book doesn't define it, but I'll ask you,  
8 Dr. Fernandez --

9 **A.** When you're alternating between sitting and standing,  
10 that's --

11 **THE COURT:** Tell us what it is you recommended so --

12 **THE WITNESS:** I recommend alternate between sitting  
13 and standing, as you said before.

14 **BY MR. DOSTART:**

15 **Q.** Perfect. Thank you, Dr. Fernandez.

16 Now let me ask you this. Is it true that a person is more  
17 likely to be fatigued faster when standing than when seated?

18 **A.** Yes.

19 **Q.** Is it true that while standing, 100 percent of the body  
20 mass is supported by the feet?

21 **A.** Yes.

22 **Q.** And that's one of the reasons why fatigue sets in faster?

23 **A.** With static standing, yes.

24 **Q.** Do you agree that one of the advantages of seated over  
25 standing operations is that seated operations require less



1 muscular activity?

2 **A.** Of the lower extremities, yes. For the upper extremities,  
3 no.

4 **Q.** But your book doesn't say that; does it, Dr. Fernandez?

5 **A.** My book may not say it, but we are talking about the lower  
6 extremities.

7 **Q.** Your book, in fact, says, "Advantages of seated over  
8 standing operations."

9 "One, requires less muscular activity, thus, delaying the  
10 onset of fatigue."

11 Do you stand by that statement, Dr. Fernandez?

12 **A.** For the lower extremities, I stand by that statement.

13 **Q.** Does your book say that?

14 **A.** No, it does not.

15 **Q.** Two, advantages of seated over standing operations, "More  
16 stability acquired for fine manipulation."

17 Do you stand by that statement, Dr. Fernandez?

18 **A.** Yes, I do.

19 **Q.** "Three, can operate foot controls more readily without  
20 postural shifts."

21 Do you stand by that statement Dr. Fernandez?

22 **A.** I do.

23 **THE COURT:** It's now 12:59 and 17 seconds. Unless you  
24 can finish by 1:00 o'clock, we're going to break right now.

25 How does it look?

1           **MR. DOSTART:** Can't talk that fast.

2           **THE COURT:** We'll break for now.

3           Dr. Fernandez, you're on cross-examination, so no talking  
4 to the lawyers overnight. So, please, be here at 7:30 in the  
5 morning.

6           **THE WITNESS:** Okay.

7           **THE COURT:** All right. You may step down. The  
8 lawyers will take care of your -- well, do you have anything  
9 that you brought to the witness stand?

10          **THE WITNESS:** Yes, sir.

11          **THE COURT:** You can take that with you. Just the  
12 items you brought.

13          What is that thing?

14          **MR. DOSTART:** That's my phone.

15          **THE COURT:** Just take the items that you brought with  
16 you to the witness stand, and the lawyers will take care of the  
17 rest.

18          **MR. DOSTART:** One housekeeping item.

19          **THE COURT:** Sure.

20          **MR. DOSTART:** On Exhibit 216-A, he wanted to indicate  
21 the vertical height of the coupon dispenser and the receipt  
22 printer.

23          **THE COURT:** Is that the chart over there?

24          **MR. DOSTART:** It is, your Honor.

25          **THE COURT:** Yes, I do. If that's what you want on

1 there.

2 **MR. DOSTART:** Okay.

3 **THE COURT:** I want it to have both sides' information.

4 **MR. DOSTART:** Thank you.

5 **THE COURT:** So you can get him to put it in there  
6 tomorrow morning.

7 **MR. DOSTART:** Okay.

8 **THE COURT:** All right. The witness is free to step  
9 outside. See you here at 7:30 in the morning. All right.  
10 Okay. Everyone else be seated.

11 Anything the lawyers need the Court for before we break  
12 for the day?

13 (Witness steps down.)

14 **MR. MATTHEW RIGHETTI:** Thank you, Your Honor. One  
15 brief thing.

16 Part of your request to the labor commissioner and the  
17 LWDA was whether counsel should brief the matter or submit  
18 materials to those agencies.

19 **THE COURT:** No. I just said that if you are going to  
20 do that, you've got to do it on my time frame so that it won't  
21 wind up being a delay in the process.

22 **MR. MATTHEW RIGHETTI:** Well, there's two things. I'm  
23 not really sure what the Court had in mind, whether we're going  
24 to --

25 **THE COURT:** If you will submit an amicus brief to the

1 labor commissioner to say, here's the way you should answer  
2 that question, fine, you have a right to do that, both sides.  
3 That's all I had in mind. I assume that both sides would want  
4 to -- not lobby, but to present their own views to the labor  
5 commissioner.

6 **MR. MATTHEW RIGHETTI:** All right.

7 **THE COURT:** You told me the other entity was defunded.

8 **MR. MATTHEW RIGHETTI:** Right. And the -- the final  
9 thing is, I think you set the deadline for Friday.

10 **THE COURT:** Friday deadline for what?

11 **MR. MATTHEW RIGHETTI:** Well, to submit.

12 **THE COURT:** What?

13 **MR. MATTHEW RIGHETTI:** Submit something to the labor  
14 commissioner.

15 **THE COURT:** Oh, I see.

16 **MR. MATTHEW RIGHETTI:** I was going to ask --

17 **THE COURT:** Are you sure it falls on Friday?

18 **MR. MATTHEW RIGHETTI:** You said one week from the  
19 order, which you issued the order Friday.

20 **THE COURT:** Well, then --

21 **MR. MATTHEW RIGHETTI:** Could we have middle of next  
22 week, perhaps?

23 **THE COURT:** How about I'll give you until the 28th.  
24 That's Wednesday.

25 **MR. MATTHEW RIGHETTI:** Thank you, Your Honor.

1           **MR. DOSTART:** Two more items, your Honor.

2           **THE COURT:** By noon. So you've got to submit it to me  
3 and them at the same time.

4           **MR. DOSTART:** Yes, Your Honor.

5           **THE COURT:** Yes, sir.

6           **MR. DOSTART:** Is there an afternoon calendar that  
7 would require the removal of everything from the courtroom?

8           **THE COURT:** No, you can leave -- please clear off the  
9 tables just in case emergencies come up. But I don't think I  
10 have anything. You can leave your boxes, and so forth, here  
11 for tomorrow, if you want.

12           **MR. DOSTART:** And then the second item is one that we  
13 probably could calculate ourselves, but it's the time that  
14 plaintiffs have remaining, or plaintiffs and defendants.

15           **THE COURT:** Well, you've used 480 minutes.

16           **MR. DOSTART:** Okay.

17           **THE COURT:** I hope you don't plan to use your entire  
18 time.

19           **MR. DOSTART:** So do I.

20           **THE COURT:** The defendants have used 644 minutes. So  
21 they have -- they have more than an hour left.

22           **MR. DOSTART:** And closing arguments are exempt from  
23 the time requirements?

24           **THE COURT:** It would be in addition to. I'm thinking  
25 about making this come out of this because of the rate this is

1 going. Yes.

2           **MR. WOHL:** Yes, Your Honor, any chance we could have a  
3 time estimate from plaintiff for how long they think their  
4 cross is --

5           **THE COURT:** How much longer do you have on cross?

6           **MR. DOSTART:** Happy to estimate that, your Honor. I  
7 would estimate that if things go smoothly we would have no more  
8 than 45 minutes to an hour, if things go smoothly.

9           **MR. WOHL:** And does plaintiff intend to put on a  
10 rebuttal case? We haven't heard.

11           **THE COURT:** Do you plan to put on a rebuttal case?

12           **MR. DOSTART:** We do not.

13           **THE COURT:** All right. So this is literally going to  
14 be our last witness.

15           **MR. WOHL:** It sounds like closing no problem for  
16 tomorrow. Plenty of time to do closing tomorrow.

17           **MR. DOSTART:** I would like to revise my estimate.  
18 Make it an hour to 15 minutes to an hour and 30 minutes.

19           **THE COURT:** Why did you suddenly double your  
20 estimates?

21           **MR. DOSTART:** I remembered something that we were  
22 going to show the Court, that I'd excluded from my estimate.

23           **THE COURT:** Well, please, let's try to do the closings  
24 tomorrow.

25           **MR. DOSTART:** We will.

1           **THE COURT:** No. The rate that we're going -- because  
2 Mr. Wohl has the opportunity to do redirect, the rate we're  
3 going we're not going to have the time.

4           Tell you what we're going to do. Whatever time with we  
5 have left over after the evidence, we're going to split it in  
6 half. If it's 18 minutes per side, that's all you get for  
7 closing. So if you want to save some time for closing  
8 tomorrow -- we don't even need to have closing. I can do this  
9 off the findings and conclusions of law. But if we have 42  
10 minutes left, each gets 21 minutes for closing.

11           If you -- so what did I say each of you get, 45 minutes?

12           **MR. WOHL:** I was going to ask, Your Honor, does it  
13 work the other way, as well?

14           **THE COURT:** No, it doesn't work.

15           **MR. WOHL:** More than 90 minutes --

16           **THE COURT:** It's capped at 45 per side. But we're not  
17 going to have that problem. So if you want to eat into that  
18 time, okay. You can. But we're going to -- we're going to  
19 finish this tomorrow by 1:00 o'clock.

20           So if you want to spend that time on cross-examination --  
21 and you're both just beating points to death and asking -- it's  
22 okay to argue with an expert, but excessive arguing is too  
23 much.

24           So I think you ought to shorten that hour and a half up  
25 and try to get it down more like the 45 minutes. But, in any

1 event, whatever -- if we wind up having, say, an hour total for  
2 closings, that's grand. But each side will, again, get 30  
3 minutes then.

4 All right.

5 **MR. DOSTART:** Understood.

6 **THE COURT:** We're going to finish tomorrow.

7 All right. See you then.

8 **MR. WOHL:** Thank you, Your Honor.

9 **MR. DOSTART:** Thank you, Your Honor.

10 **MR. ADKINS:** Thank you, Your Honor.

11 (At 1:07 p.m. the proceedings were adjourned until  
12 Tuesday, November 20, 2012, at 7:30 a.m.)

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I N D E X

DEFENDANT'S WITNESSES

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(SWORN)

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E X H I B I T S

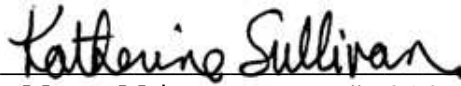
<u>TRIAL EXHIBITS</u>	<u>IDEN</u>	<u>VOL.</u>	<u>EVID</u>	<u>VOL.</u>
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We, KATHERINE POWELL SULLIVAN and DEBRA L. PAS,  
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DATE: Monday, November 19, 2012



Katherine Powell Sullivan, CSR #5812, RPR, CRR  
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